# SECTION 3 SUBMISSION REQUIREMENTS

**Table of Contents** 

			<u>Page No</u>
3.1	GENE	ERAL	1
3.2	COORDINATION WITH OUTSIDE AGENCIES		
3.3	PREL	IMINARY DESIGN	2
3.4	FINAL	L DESIGN	3
	3.4.1	GENERAL	3
	3.4.2	PHASE "A" SUBMISSION	4
	3.4.3	PHASE "B" SUBMISSION	7
	3.4.4	PHASE "C" SUBMISSION	11
		3.4.4.1 Pre-Phase "C" Submission Requirements	11
		3.4.4.2 Phase "C" Submission	12
	3.4.5	PHASE "D" SUBMISSION	15
	3.4.6	POST DESIGN SERVICES	17
		3.4.6.1 Evaluation of Bid Results	
		3.4.6.2 Changes-of-Plan	
		3.4.6.3 Shop Drawing Review	
		3.4.6.4 Requests for Information	
		3.4.6.5 As-Built Plans	
		3.4.6.6 Lighting System	21
		List of Exhibits	
			<u>Page No</u>
Exhibi	t 3 - 1	Phase "A" Checklist	7
Exhibi	t 3 - 2	Phase "B" Checklist	10
Exhibi	t 3 - 3	Pre-Phase "C" and Phase "C" Checklist	14
Exhibi	t 3 - 4	Phase "D" Checklist	17
Exhibi	t 3 - 5	Design Element Modification Request	22
Exhibi	t 3 - 6	Summary of Permit Requirements	23
		Environmental Permits	
Exhibi	t 3 - 8 S	Shop and Working Drawing Stamps	23
Exhibi	t 3 - 9 l	Material Acceptance Criteria Matrix	24

# SECTION 3 SUBMISSION REQUIREMENTS

#### 3.1 GENERAL

A project may be a single construction contract, or it may consist of multiple construction contracts within a project or a Design Section. Generally, all projects have a preliminary and final design. However, if in the Authority's Engineering Department opinion a preliminary design phase is unnecessary, such as a "deck repair project", they may direct that a project proceed directly to later the stages of final design.

In the following pages, the number of sets of plans required for submittal with each phase submittal is given. These are approximate numbers anticipated to be required for complete plan review; however, the Authority's Engineering Department may at times find it necessary to revise the number of sets required for any phase submittal. The Engineer shall confirm the number of sets required with the Authority's Project Manager three (3) weeks prior to each submission.

When a phase review is completed, one (1) or more set(s) of contract documents may be returned to the Engineer, which will reflect the comments of the reviewers noted in red. When the succeeding Phase is submitted, the Engineer is to include these comment sets as part of the submission. Every comment shown on the sets is to be addressed. No comments are to be ignored or dismissed, but they all must be acknowledged with a check mark signifying agreement, or an explanation or answer given. All of the Engineer's responses to the comments are to be green pencil and written directly on the comment set.

Review periods will be established on a project-by-project basis. Generally, the Authority's Engineering Department requires two (2) weeks to review a phase submission, and a consultant will be permitted a two (2) week period to prepare a rebuttal to the comments.

#### 3.2 COORDINATION WITH OUTSIDE AGENCIES

As part of their work in preparing contract plans, it will be necessary for the Engineer to meet with outside agencies as approved or as directed by the Authority's Engineering Department concerning such matters as the relocation or rearrangement of local roadways, utilities, sewerage works, etc. To keep the Authority's Engineering Department well informed regarding the progress of the plans and the commitments made by both sides during these discussions, the Engineer is to submit to the Authority's Engineering Department four (4) copies of a memorandum of record covering each meeting held with any outside agencies. The memoranda are to contain at least the following:

Agency contacted and the reason for the meeting; the date and location of the meeting; list of persons in attendance with their titles and level of responsibility; topics discussed and solutions reached; criteria used for resolving problems such as: company policy, municipal ordinance, State Board of Health requirement, etc.; areas

requiring Authority decisions; problems unresolved; and areas where betterments are involved and the extent to which the outside agency is aware of its participation.

In addition, the Engineer is to submit the Authority's Engineering Department four (4) copies of all correspondence both to and from these outside agencies in which approvals, concurrences or any commitments are made by either the Engineer or the outside agency. Four (4) copies of correspondence for receipt of transmission of plans, specifications, etc., to or from the Engineer, are also to be sent to both the Authority's Engineering Department.

#### 3.3 PRELIMINARY DESIGN

Preliminary design studies are to be developed at either 1"=100' or 1"=200' scale, which will be used to establish preliminary horizontal and vertical alignment, stormwater management characteristics, interchange configurations and local road treatments. During this stage, preliminary cost estimates and tentative maintenance and protection of traffic schemes will be initiated, and an approximate right of way impact identified.

Studies are to be shown on reproducible topographic or aerial photo base maps, as directed by the Authority's Engineering Department and are to be accurately drawn in Computer Aided Drafted (CAD).

Where required or warranted, alternative studies are to be made. The studies may consist of, but need not be limited to, horizontal and vertical alignment shifts, channelization alternatives, alternative interchange configurations and right of way comparisons. In all alternative studies, the presentation is to be similar to the remainder of the project and for each alternative, the Engineer will prepare a cost estimate, a list of advantages and disadvantages and their recommendations.

When the preliminary plans are submitted for review and approval, the submission shall consist of the following:

1. Three (3) sets of prints and a printable document format (PDF) file of the plans and profiles.

A minimum of one (1) set shall be colored, and additional colored sets may be requested by the Authority's Engineering Department, showing the proposed construction in accordance with the following legend:

Water and Waterways	_	aqua
Authority Roadways	_	yellow mainline, ramps, U-turns, etc.
Authority Shoulders	_	brown
Local Roads	_	green
Right of Way	_	red
Structure Outlines	_	black
Slope Lines	_	dashed
Cut	_	brown
Fill	_	green
Parks, Hatched	_	green
Mileposts, Outlined	_	black

- 2. Alternatives studied including alignments, environmental concerns, schedule considerations and cost estimates.
- 3. Project cost estimate and contract breakdown with respective costs.
- 4. A statement describing the project; any problem areas warranting detailed studies during a subsequent phase; meetings held with various agencies to resolve problems such as roadway widths, etc.; brief construction sequence; estimated earthwork as to quantity of borrow or waste for the project; environmental and permit concerns and construction coordination with adjacent projects.
- 5. Typical sections showing lane dimensions, local roadway widths, grading criteria, median treatment, etc.
- 6. Show the proposed project and the approximate locations of existing utilities in plan with conflicts identified.

#### 3.4 FINAL DESIGN

#### 3.4.1 General

During the preparation of final contract plans, interim submissions are to be made to the Authority's Engineering Department. These phase submissions are required at various stages in development to allow for review of the material first, for concept, subsequently for specifics and, finally, for completeness. The submissions are defined as follows:

Phase "A" - graphical 1" = 50' or 1" = 30' scale plans - contract documents 35 percent complete. A single submission should cover an entire project or Design Section.

Phase "B" - computed alignment - contract documents 70 percent complete. A separate submission is required for each construction contract within a project or Design Section.

Phase "C" - complete plans, quantities, specifications, schedule and cost estimates - contract documents are 95 percent complete and subject to thorough review by the Authority's Engineering Department. A separate submission is required for each construction contract within a project or Design Section.

Phase "D" – complete plans and specifications revised in accordance with comments resulting from Phase "C" review. The Contract is 100 percent complete and ready for advertisement. A separate submission is required for each construction contract within a project or Design Section.

However, when multiple construction contracts are required within a Design Section, or the environmental permitting encompasses multiple Design Sections, the Phase "A" submittal requirements may be modified at the direction of the Authority's Project Manager, to include more detailed design. Such elements may include, but are not limited to, computed alignment, recommended foundation type(s), structural GP&E, completed drainage system, etc. In such instances, interim submissions, as directed by the

Authority's Project Manager, will be required before the formal Phase "A" submission, which may include the computed alignment, stormwater management impacts, bridge type studies, etc.

In the case of construction contracts involving Architecture / Buildings Subsection 6B.7 of Section 6B (Structures Plan Preparation) of this Manual shall be referred to for modified submission requirements.

All submission documents shall indicate the phase submittal and the date of the submission.

#### 3.4.2 Phase "A" Submission

A Phase "A" submission is a graphical 1"=50' or 1"=30' scale horizontal alignment and graphical 1"=5' vertical and 1"=50' horizontal scale profiles. The minimum information required for a Phase "A" submission is as follows:

- The submission shall consist of a complete electronic submission in PDF format and six (6) copies of all materials, with three (3) sets of plans colored in accordance with the color scheme noted for Preliminary Plans. One (1) or more sets will be returned to the Engineer with review comments in red, and there may be additional written comments in memorandum format.
- 2. The Engineer shall submit a Design Element Modification Request (Exhibit 3-5) to the Authority's Engineering Department listing all design elements that do not meet the minimum criteria, if there are any. Except in very specific cases with explicit justification, approval of modified design elements will not be granted. Back up shall be included detailing why a design element shall not be standard, including impacts and costs. If any specific design criteria is not met and appropriate approvals from the Authority's Engineering Department are not received, the submission will be rejected without further or complete review, and a resubmission will be required, at no additional cost to the Authority.
- 3. The alignment shall be at 1"=50' or 1"=30' scale. If 2' x 3' cut sheets are used, the same information as shown on these sheets is to be reproduced and the cut sheets are to be spliced together to form a manuscript. Large sheets shall be used in interchange areas in an attempt to show the full interchange on the fewest number sheets possible.
- 4. Alignments shall show all horizontal information, including roadway designations, stationing, station equations, normal pavement dimensions and cross slopes, pavement dimensions at beginning and end of transitions, radii, PC and PT locations, superelevation for each curve, slope line, existing property lines, proposed right of way lines, existing and proposed utility relocations and detours.
- 5. Profiles shall show roadway designations, structures, stationing, grades, existing ground, proposed ground, minimum vertical clearances, complete vertical curve information including K values, ramp take-offs superimposed on mainline, mainline superimposed at ramp nose, physical noses, and in loops, the adjacent ramp profiles superimposed in

- concentric areas, superelevation, superelevation transitions, horizontal curve radii and the design speed. Profiles shall be at a scale of 1"=5" vertical and 1" = 50" horizontal.
- 6. Typical Sections are required for mainline roadways, ramps, local roads, access roads and any other roadway or parking lot areas. The sections shall include pavement make up, curb types, guard/guide rail treatment, grading criteria, sidewalks, medians, barrier, etc.
- 7. A completed boring contract and special soils treatment recommendation submitted for approval. See Section 5 (Geotechnical Engineering) of this Manual for additional details as well as "Pre-Phase A" requirements.
- 8. State, County and Municipal agency approval, in writing, as to concurrence with the concept for all affected roadways as to proposed construction, maintenance, protection of traffic, and intent as to participation in betterments.
- 9. The roadway plans shall show existing property lines and proposed right of way lines and method of setting right of way. The Authority's Project Manager shall be informed of any unique situations or problem areas once identified. Right-of-Way documents required shall be in accordance with Section 8 (Right-of-Way) of this Manual.
- 10. Conceptual lighting plans and supporting documents prepared in accordance with Section 7 (Lighting and Power Distribution Systems) of the Design Manual.
- 11. Conceptual ITS plans prepared in accordance with Section 8 (ITS and Communications) of the Design Manual.
- 12. Show the existing utilities and the proposed project in plan with the utility conflicts identified. See Section 7 (Utility Installations, Relocations and Adjustments) of this Manual for additional information.
- 13. For Contracts with bridge structures, 8½" x 11" structure sketches shall be submitted for review and approval as soon as the necessary information is available (prior to the Phase A submission). See Section 6B (Structures Plan Preparation) of this Manual for additional information on this submission.
- 14. Provide the Authority's Engineering Department with a written confirmation of the structural maintenance jurisdiction.
- 15. Noise Barrier Report prepared in accordance with Section 2 (Structures Design) of the Design Manual.
- 16. Toll Plaza buildings typically require an Architect and close coordination with the Engineer. A detailed written list of activities to be completed shall be submitted identifying responsibilities and who shall complete them. See Section 11 (Facility Buildings and Toll Plazas) of the Design Manual for more information.
- 17. Conceptual signing and striping layouts prepared in accordance with Sections 6A and 6B (Signing and Striping) of the Design Manual.
- 18. The layout of Maintenance Buildings shall be discussed with the Maintenance Division and recommendations are to be part of this

- submission. See Section 11 (Facility Buildings and Toll Plazas) of the Design Manual for more information.
- 19. Alternatives studied in developing the recommended alignment shall be submitted in sufficient detail, including costs, maintenance and protection of traffic schemes and constructability issues, so that the reason(s) they are not being considered for further development are readily apparent. Alternatives suggested by the Authority's Engineering Department shall be studied by the Engineer in complete detail.
- 20. Environmental considerations shall be incorporated into the plans such as wetlands, contaminated or hazardous material, earth berms, walls, low profiles, glare/light pollution, water retention/infiltration basins and/or swales, etc. A summary of anticipated environmental permits shall also be provided. See Exhibit 3 6 for a sample table and Exhibit 3 7 for a partial listing of potential permits/approvals.
  - Unless already completed in conjunction with the Preliminary Design of the project, in accordance with Section 12 of the Design Manual, an Environmental Screening Report shall be provided with or prior to the Phase A submission. If applicable, an E.O. 215 Environmental document shall also be provided at this time.
- 21. Contract cost estimate (to the nearest \$100,000), any comparative cost estimates made in connection with alternative studies, approximate earthwork, indicating total yardage, and whether the project is a waste or borrow project.
- 22. Any changes in the previously submitted cost estimate or construction schedule are to be noted and the reason(s) given.
- 23. Conceptual construction sequence and schematics for maintenance and protection of traffic during construction for mainline roadways, ramps and local roads. Plans shall show existing and proposed roadways and shall include a brief explanation of construction sequence including any detours.
- 24. Completed Phase "A" checklist. See Exhibit 3 1 for a sample.

# Exhibit 3 - 1 Phase "A" Checklist

#### Phase "A" Checklist

35 Percent Complete 1" = 30' or 1" = 50' Scale Plans

<u>SUBMISSION</u>	<b>SUBMISSION</b>	<u>REMARKS</u>
a. Six (6) Sets of All Material, with Three (3)		
Sets of Plans Colored and PDF Files		
b. Design Element Modification Request		
Form		
c. Completed Boring Contract and Special		
Soil Treatment Recommendations		
d. State, County and Municipal Approval in		
Writing		
e. Preliminary Right of Way Review		
f. Conceptual Lighting Plans and Supporting		
Documents		
g. Conceptual ITS Plans*		
h. Proposed Utility Conflicts*		
i. Structure Sketches*		
j. Structural Maintenance Jurisdiction		
Confirmed		
k. Noise Barrier Report*		
Toll Plaza Building Activity Summary*		
m. Conceptual Signing and Striping		
n. Maintenance Building Recommendations*		
o. Summary of Alternatives		
p. List of Environmental Permits / Approvals		_
Anticipated		
q. Environmental Screening Report		_
r. Cost Estimate		
s. Construction Sequence		

<sup>\*</sup>IF APPLICABLE

#### 3.4.3 Phase "B" Submission

The Phase "B" submission occurs for each construction contract at the stage of plan development when the horizontal and vertical alignment has been computed but the work has not progressed to the point of computing detailed quantities. These submission requirements may be modified by the Authority's Project Manager to account for project specific needs.

The following information is required at the time a Phase "B" submission is made:

1. Ten (10) half-size sets of printed plans without cross sections twelve (12) sets if the Contract includes a toll plaza), and one full-size set of plans

- without cross sections along with a complete electronic submission in PDF format. Additional plans may be required for review by outside entities such as NJDOT, Counties or Municipalities.
- 2. Three (3) bound copies of the drainage calculations, geotechnical report, roadway lighting design calculations, and any other material deemed pertinent to the project as determined by the Authority's Engineering Department.
- Complete computed horizontal and vertical alignment based upon the approved Phase "A" submission. This information is to be shown on the final plan sheets. See Section 6A (Plan Preparation) of this Manual for additional information.
- 4. Two half-size sets of Cross-sections at 50 foot intervals, or grading plans.
- 5. Final Typical Sections.
- Maintenance and Protection of Traffic schematics, including a written description and a Traffic Impact Report, if applicable. Details of construction access to the work site shall be included. See Section 9 (Traffic Control During Construction) of the Design Manual for additional information.
- 7. Construction Sequence.
- 8. Detours, including written approval from local jurisdictions. For roadway closures of non-State highways not under Authority jurisdiction in excess of 48 hours, certification reports shall be submitted to the State in accordance with N.J.A.C.16:27-4.2(f), copies of which shall be provided to the Authority.
- 9. Fencing and construction access treatment.
- 10. Complete drainage pattern with the major drainage sized. See Section 4 (Drainage) of the Design Manual for additional information.
- 11. Contract cost estimate (to the nearest \$100,000).
- 12. Approximate earthwork quantities together with any special soils treatment including the location and type of sand drains, muck excavation, contaminated or hazardous material, overload, etc.
- 13. Contract proposal items anticipated at this time, including non-standard items. The items shall be submitted in electronic format in accordance with the Authority's "Manual for Unit Codes".
- 14. List of Standard Drawings and Reference Drawings to be included.
- 15. Preliminary construction details.
- 16. 1" = 30' scale layouts and supporting calculations and documents of signing, ITS and lighting design in accordance with the requirements noted in Sections 6A and 6B (Signing and Striping) and Section 7 (Lighting and Power Distribution Systems) of the Design Manual. Include major sign structures and the lighting layout as detailed in Section 7.
- 17. Three (3) sets of prints of the approved reconstruction plan and one (1) copy of letter(s) of approval from affected agencies noting their

- concurrence in the Engineers' recommendations. Scanned PDF files of the original plans shall be provided.
- 18. Structural Drawings and Non-Standard Bearing Report (if required) as noted in Section 6B (Structures Plan Preparation) of this Manual.
- 19. Landscaping drawings as noted in Section 10 (Landscaping) of the Design Manual.
- 20. Approved utility checklists and schemes with utility owners' preliminary cost estimates. See Section 7 (Utility Installations, Relocations and Adjustments) of this Manual for additional information.
- 21. Utility services to Authority facilities preliminarily established with utility suppliers.
- 22. A written description of the contract calling attention to any unusual problems, special treatments, or any area where a change would cause considerable revisions if altered at a future date.
- 23. Preliminary right of way plans, together with a list of parcels required for contract construction in accordance with Section 8 (Right-of-Way) of this Manual. Construction easements, temporary and permanent access roads and utility, drainage or slope easements shall be noted and a separate written statement included stating the reason for the easements and the proposed method of treatment. See Section 7 (Utility Installations, Relocations and Adjustments) and Section 8 (Right-of-Way) of this Manual for additional information. An incomplete submission must be accompanied by a statement listing the parcels not completed, why they are incomplete and when they will be submitted.
- 24. Flood Hazard Area, wetlands, soil erosion and all other environmental permit application(s) or navigation permit application forwarded to the Authority's Engineering Department. Completed summary of permit requirements, (see Exhibit 3-6 for a sample table and Exhibit 3-7 for a partial listing of permits).
- 25. Riparian grant applications forwarded to the Authority's Engineering Department.
- 26. Completed Phase "B" Checklist (see Exhibit 3-2 for a sample).
- 27. Phase "A" review material with responses to plan sheet comments either in writing or written in green on the plans, and written responses to all written comments.

#### Exhibit 3 - 2 Phase "B" Checklist

#### Phase "B" Checklist

70 Percent Complete Contract Documents

	SUBMISSION	SUBMISSION	<u>REMARKS</u>
a.	Ten (10) half-size Sets of Plans without cross sections Twelve (12) Sets if Contract Affects a Toll Plaza). One full-size Set of Plans, without cross sections and a complete set of PDF Files including cross sections.		
	Three (3) Copies Drainage Calculations		
	Three (3) Copies Geotechnical Report Noting Special Soils Treatment Including Location and Type of Sand Drains, Muck Excavation and Overload*		
d.	Three (3) Copies Roadway Lighting Calculations		
e.	Complete Computed Horizontal & Vertical Alignment		
f.	Two half-size sets of Cross Sections at 50 Foot Intervals		
	Final Typical Sections		
h.	Maintenance and Protection of Traffic Schematics		
i.	Construction Sequence		
j.	Detours*		
k.	Fencing and Construction Access Treatment*		
I.	Complete Drainage Pattern with Major Drainage Sized		
m.	Contract Cost Estimate		
	Approximate Earthwork Quantities		
0.	List of those Proposal Items for which the Unit Codes are known. To be submitted in accordance with the "Manual for Unit Codes".		
·	List of those Proposal Items for which the Unit Codes are NOT known. To be submitted in accordance with the "Manual for Unit Codes".		
q.	List of Standard Drawings and Reference Drawings		
r.	Preliminary Construction Details		
9	Signing Layouts		

t. Preliminary ITS Drawings  u. Preliminary Lighting Plans, Calculations and Supporting Documents  v. Three (3) Sets of Prints of the Plan and One (1) Copy of Letter(s) of Approval of Affected Local Agencies Noting Their Concurrence With the Engineer's Recommendations, and PDF Copies of the Plans*. For roadway closures of non-State highways not under Authority jurisdiction in excess of 48 hours, copies of certification reports
u. Preliminary Lighting Plans, Calculations and Supporting Documents  v. Three (3) Sets of Prints of the Plan and One (1) Copy of Letter(s) of Approval of Affected Local Agencies Noting Their Concurrence With the Engineer's Recommendations, and PDF Copies of the Plans*. For roadway closures of non-State highways not under Authority jurisdiction in excess of 48 hours, copies of certification reports
and Supporting Documents  v. Three (3) Sets of Prints of the Plan and One (1) Copy of Letter(s) of Approval of Affected Local Agencies Noting Their Concurrence With the Engineer's Recommendations, and PDF Copies of the Plans*. For roadway closures of non-State highways not under Authority jurisdiction in excess of 48 hours, copies of certification reports
v. Three (3) Sets of Prints of the Plan and One (1) Copy of Letter(s) of Approval of Affected Local Agencies Noting Their Concurrence With the Engineer's Recommendations, and PDF Copies of the Plans*. For roadway closures of non-State highways not under Authority jurisdiction in excess of 48 hours, copies of certification reports
Affected Local Agencies Noting Their Concurrence With the Engineer's Recommendations, and PDF Copies of the Plans*. For roadway closures of non-State highways not under Authority jurisdiction in excess of 48 hours, copies of certification reports
Affected Local Agencies Noting Their Concurrence With the Engineer's Recommendations, and PDF Copies of the Plans*. For roadway closures of non-State highways not under Authority jurisdiction in excess of 48 hours, copies of certification reports
Concurrence With the Engineer's Recommendations, and PDF Copies of the Plans*. For roadway closures of non-State highways not under Authority jurisdiction in excess of 48 hours, copies of certification reports
Recommendations, and PDF Copies of the Plans*. For roadway closures of non-State highways not under Authority jurisdiction in excess of 48 hours, copies of certification reports
non-State highways not under Authority jurisdiction in excess of 48 hours, copies of certification reports
non-State highways not under Authority jurisdiction in excess of 48 hours, copies of certification reports
hours, copies of certification reports
submitted to the State in accordance
submitted to the State in accordance
with N.J.A.C.16:2-4.2(f) shall be
provided.
w. Structural Drawings and Non-Standard
Bearing Report*
x. Landscaping Drawings*
y. Approved Utility Check Lists and Schemes
and utility owners' preliminary cost
estimates
z. Utility Services to Authority Facilities*
aa. Written Description of Contract Calling
Attention to:
1. Unusual Problems*
Special Treatments*
3. Areas Where Change Would Cause
Considerable Revisions*
bb. Approved Right of way Plans, Together
with a List of Parcels Required
cc. Environmental Permit Applications
Forwarded to the Authority's Engineering
Department, and a Summary of Permit
Requirements*
dd. Remedial Action Workplan* /
Remedial Investigation Report* /
Site Investigation Report*
ee. Riparian Grant Application*
ff. Phase "A" Review Material with
Responses

<sup>\*</sup>IF APPLICABLE

#### 3.4.4 Phase "C" Submission

#### 3.4.4.1 Pre-Phase "C" Submission Requirements

The Pre-Phase "C" submission shall be submitted at least four (4) weeks prior to the Phase "C" submission deadline, unless otherwise

noted, to allow appropriate time to review and include all necessary changes in the Phase "C" submission.

The Pre-Phase "C" submission is to include:

- 1. Utility Orders forwarded to the Authority's Engineering Department for execution.
- 2. Construction Railroad Data forms (see the Authority's website for additional information) shall be completed by the Engineer and submitted to the Authority's Engineering Department with the necessary plans and work description immediately after Phase "B" is approved. The Authority's Engineering Department will transmit this information to the railroad, and upon its return from the railroad, notify the Engineer what insurance limits will be required in the contract specifications.
- 3. Final approvals in writing of State, County and Municipal agencies involved. This includes State approval of the submitted certification reports for roadway closures of non-state highways not under Authority jurisdiction in excess of 48 hours, per N.J.A.C.16:27-4.2(f).
- 4. Utility service to Authority facilities finalized in accordance with Section 7 (Utility Installations, Relocations and Adjustments) of this Manual.
- 5. Agreements for jurisdiction and maintenance submitted in accordance with the requirements of Section 1 (Policies) of this Manual.
- 6. Pre-Phase "C" lighting and ITS submission in accordance with Section 7 (Lighting and Power Distribution Systems) and Section 8 (ITS and Communication Systems) of the Design Manual.
- 7. Initial submission to DCA, if applicable, in accordance with Section 11 (Facility Buildings/Toll Plazas) of the Design Manual.

#### 3.4.4.2 Phase "C" Submission

A Phase "C" submission is a 95 percent complete contract consisting of plans, supplementary specifications, quantity calculations, Engineer's Estimate, and other material deemed appropriate by the Authority's Engineering Department. All items required for the construction, such as right of way, necessary permits and utility orders, have been completed.

The Phase "C" submission is to include:

 Ten (10) half-size sets of printed plans without cross sections (twelve (12) sets if the contract includes a toll plaza), one full-size set of plans without cross sections, including quantities, pay items and final construction details, along with a complete electronic submission in PDF format. Additional plans may be required for review by outside entities such as NJDOT, Counties or Municipalities.

- 2. Five (5) sets of completed Supplementary Specifications prepared in accordance with the instructions on the Authority's website, along with a complete electronic submission in PDF format.
- 3. Two (2) half-size sets of cross sections at 50-foot intervals.
- 4. Two (2) sets of roadway and structure quantity calculations.
- 5. Proposed field office location if applicable, and method of access.
- 6. Utility service to Authority facilities finalized in accordance with Section 7 (Utility Installations, Relocations and Adjustments) of this Manual.
- 7. An Engineer's Estimate, without rounding or contingencies, showing any reimbursable items. Additionally, for Contract Classification determination, provide a breakdown of the Estimate into the following categories: Mobilization, Grading and Drainage, Paving, Bridge Structures, Electrical, Specialty Items, and MPT.
- 8. Three (3) copies of the Road User Cost calculations prepared in accordance with the Authority's "Road User Cost Manual and Calculation Model", as directed by the Authority's Project Manager.
- Three (3) copies of the calculations to determine the dollar amount to charge for Liquidated Damages, as directed by the Authority's Project Manager.
- 10. Completed summary of permit status. See Exhibit 3-6 for a sample table and Exhibit 3-7 for partial listing of permits.
- 11. Three (3) copies of the Critical Path Method (CPM) Progress schedule for the Construction Activities. See Section 2 (OPS Reporting) of this Manual for additional information.
- 12. Completed Phase "C" Checklist (see Exhibit 3-3 for a sample.)
- 13. Phase "B" review material with responses to plan sheet comments either in writing or written in green on the plans, and written responses to all written comments.
- 14. Lighting and electrical calculations, if required. See Section 7 (Lighting and Power Distribution Systems) of the Design Manual.
- 15. Phase "C" Unit Code Electronic Submission developed in accordance with the "Manual for Unit Codes".
- 16. Completed LRFR load rating analyses calculations.
- 17. As indicated in the Supplementary Specification Section 107.11, submit to NJTA (attn.: Tony Valte) a CD labeled "Phase C" (DRAFT) with the list of reference documents and all reports, asbuilts, contract drawings, permits and any other information to be made available during advertising.
- 18. Completed Highway Agency Stormwater General Permit Post-Construction Program Design Checklist for Individual Projects form.

19. Contract Specific Materials Acceptance Criteria Matrix.

#### Exhibit 3 - 3 (a)

#### Pre-Phase "C" and Phase "C" Checklist

#### Pre Phase "C" and Phase "C" Checklist

95 Percent Complete Contract Documents

1. <u>P</u>	RE-PHASE "C" SUBMISSION	SUBMISSION	<u>REMARKS</u>
a.	Utility Orders Forwarded*		
b.	Construction Railroad Data Forms*		
C.	Final Approvals, in Writing, from Local Agencies*. This includes State approval of the submitted certification reports for roadway closures of non-state highways not under Authority jurisdiction in excess of 48 hours, per N.J.A.C.16:27-4.2(f).		
d.	Final Utility Service to Authority Facilities*		
e.	Agreements for Jurisdiction and Maintenance*		
f.	Pre-Phase "C" Lighting and ITS Submission Submitted and Approved		
g.	Initial submission to DCA*		·

Exhibit 3 - 3 (b)

Phase "C" Checklist

#### Phase "C" Checklist

2.	PH	HASE "C" CHECKLIST	SUBMISSION	<u>REMARKS</u>
	a.	Ten (10) Sets of half-size Contract Plans without cross sections. Twelve (12) Sets if Contract Affects a Toll Plaza), one full-size set without cross sections and a complete set of PDF Files		
	b.	Five (5) Sets of Supplementary		
		Specifications and PDF Files		
	c.	Two (2) half-size sets of Cross Sections at		
		50 foot intervals		
	d.	Two (2) Sets of Roadway and Structure		
		Quantity Calculations		

<sup>\*</sup>IF APPLICABLE

e.	Field Office Location and Access*	
f.	Utility Service to Authority Facilities	
	Finalized	
g.	Detailed Engineer's Estimate including	
	breakdown	
h.	Three (3) Copies Road User Cost	
	Calculations	
i.	Three (3) Copies Liquidated Damages	
	Cost Evaluation	
j.	Summary of Permit Requirements	
k.	Remedial Action Selection Report*	
	Remedial Action Workplan*	
l.	Three (3) Copies Construction Schedule	
	Phase "B" Review Material with Responses	
n.	List of those Proposal Items for which the	
	Unit Codes are known. To be submitted in accordance with the "Manual for Unit	
	Codes".	
	List of those Proposal Items for which the	
0.	Unit Codes are NOT known. To be	
	submitted in accordance with the "Manual	
	for Unit Codes"*.	
D.	List of approved light Standard Vendors as	
β.	required in accordance with Design Manual	
	Section 2.6	
q.	Highway Agency Stormwater General	
•	Permit Post-Construction Program Design	
	Checklist for Individual Projects form.	
r.	Contract Specific Materials Acceptance	
	Criteria Matrix	

\*IF APPLICABLE

#### 3.4.5 Phase "D" Submission

A Phase "D" submission is a 100 percent complete contract consisting of plans, supplementary specifications, Engineer's Estimate, and other material deemed appropriate by the Authority's Engineering Department.

The Phase "D" submission is to include:

- 1. One (1) complete set of signed original Mylar drawings. Mylars of Standard and Reference Drawings are not required.
- 2. One (1) CD labeled "Phase D Final (CADD Contract Deliverable)" containing all electronic files in accordance with the current NJTA CADD Manual entitled "NJTA, New Jersey Turnpike and Garden State Parkway Roadways CADD Standards Manual." This disk must be delivered to the CADD Section for inspection and archival procedures.
- 3. One (1) CD labeled "Phase D Final (Contracts Section Deliverable)" containing:

- a. The signed Plans as a multi-page PDF or ZIP of individual TIF files. The plans may be digitally stamped with a signature, or a scan of the original signed plans. The resolution of the plan set shall be a minimum of 300 DPI.
- b. The Supplementary Specifications in Microsoft Word format.
- c. The Phase D Electronic Submissions per the "Manual for Unit Codes."
- d. The Engineer's Estimate, including the latest breakdown as described in the Phase C requirements, in Excel format.
- e. All Reference Drawings and/or Reference Material listed in Supplementary Specification Subsection 102.04 shall be submitted according to these guidelines:
  - All files shall be compressed into a single ZIP file and named:

[Contract No.]\_Reference.zip,

e.g. T100.256\_Reference.zip.

- If the files were provided by the Authority, the filenames shall not be altered. They should otherwise follow the file naming convention provided for in the CADD Standards Manual.
- Within the ZIP file, the files may be organized into folders labeled with their corresponding Location (i.e., Str. No.).
- 4. Three (3) half-size bound sets of both the final plans (one (1) set sealed).
- 5. Two (2) bound copies of the final Supplementary Specifications.
- 6. Three (3) individually signed copies of the Engineer's Estimate prepared in accordance with Section 10 (Bidding Process) of this Manual.
- 7. Three (3) copies of the Critical Path Method (CPM) estimated construction schedule for the Construction Activities. See Section 2 (OPS Reporting) for additional information.
- 8. A completed "Fiber Optic Cable Design Review Certification Form", (see the Authority's website for additional information).
- 9. Phase "C" review material with responses to plan sheet comments either in writing or written in green on the plans, and written responses to all written comments.
- 10. Completed Phase "D" Checklist, See Exhibit 3-4 for a sample.
- 11. Three (3) hard copies and one (1) electronic copy of the Drainage Infrastructure Maintenance Plan, if required.

The letter of transmittal shall indicate status of utility orders, permits, right of way and any other requirements not fully met. When directed by the Authority's Engineering Department, additional sets of plans, as directed by

the Authority's Engineering Department, shall be sent to the County and/or Municipal Engineer for their information.

## Exhibit 3 - 4 Phase "D" Checklist

#### Phase "D" Checklist

100 Percent Complete Contract Documents Revised in Accordance with Phase "C" Review Comments, and Ready for Advertisement

1. SUBMISSION SUBMISSION REMARKS a. One (1) Set Original Mylar Drawings Signed. Standard and Reference Drawings NOT required. One (1) CD labeled "Phase D Final (CADD Contract Deliverable)" containing the files described in 3.4.5. c. One (1) CD labeled "Phase D Final (Contracts Section Deliverable)" containing the files described in 3.4.5. d. Three (3) half-size Sets of Prints (One (1) Set with Raised Seal on Each Sheet) e. Two (2) Bound Copies of Supplementary Specifications Three (3) Copies of Final Engineer's Estimates Individually Signed g. Three (3) Copies Estimated Construction Schedule h. Fiber Optic Cable Design Review Certificate Letter of Transmittal with Status of Utility Orders, Permits, ROW and any Requirements not Fully Met

#### 3.4.6 Post Design Services

#### 3.4.6.1 Evaluation of Bid Results

j. Phase "C" Review Material with Responses
 k. Drainage Infrastructure Maintenance Plan
 l. Copies of resolutions of support from counties and/or local municipalities for any roadway closures of non-State highways not under Authority jurisdiction in excess of 48 hours.

Within three (3) business days of a bid opening, a consultant shall review all the results and check them for any irregularities, such as an unbalanced bid. The Engineer shall then transmit a formal letter of recommendation as to the award of the contract to the Authority, and send a copy to the General Consultant. The General Consultant shall

review the Engineer's recommendation and either approve or disagree with the Engineer's recommendation.

#### 3.4.6.2 Changes-of-Plan

If during the course of the construction the Resident Engineer determines that a formal change-of-plan is necessary, the Authority's Engineering Department will direct the Engineer to prepare it. The procedures for preparing a change-of-plan are located in Section 9 (Addenda and Changes of Plan) of this Manual. To prevent costly construction delays, the Engineer shall expeditiously prepare a change-of-plan, as directed by the Authority's Engineering Department.

#### 3.4.6.3 Shop Drawing Review

During the course of construction, the Resident Engineer (Construction Manager or CM) will forward to the Design Engineer (DE), shop drawings and working drawings for review and approval. The DE shall review and return all shop drawings and working drawings to the CM or the Authority, as appropriate, in accordance with Subsection 104.08 of the Specifications and the below provisions. When estimating the level of effort required to perform post-design and construction management services, the DE and CM shall assume that the level of shop drawing and working drawing review, outlined in the below provisions, will be included in their respective scopes of service.

- The DE shall review and approve all required shop drawings for permanent features designed by the DE, which are represented within the Contract Documents. Shop drawings are documents furnished by suppliers and/or manufacturers of various materials and equipment, which illustrate how specific portions of the works shall be fabricated. Review of shop drawings is for general compliance with the Contract documents. All reviewed shop drawings shall be stamped by the DE using Stamp A shown in Exhibit 3-8.
- The DE shall review and recommend for approval shop drawings and working drawings for permanent features designed by the including supporting calculations. include Contractor, which proprietary design elements which have been provided by the Contractor or the Contractor's vendors including (but not limited to) Mechanically Stabilized Earth (MSE) walls, High Load Multi-Rotational (HLMR) bearings, and modular bridge joint systems. Review of these shop and working drawings is for general conformance with the design concepts and criteria represented within the Contract documents. All reviewed shop and/or working drawings shall be stamped by the DE using Stamp B shown in Exhibit 3-8. Submissions stamped as "Recommended for Approval" shall be returned to the Authority for approval by the Office of the Chief Engineer of the New Jersey Turnpike Authority. Where the Office of the Chief Engineer deems the submitted shop and/or working drawings acceptable, they

will be stamped as 'Approved' by an authorized representative of the Chief Engineer using Stamp C as shown in Exhibit 3-8. Approved shop and/or working drawings will then be returned to the CM by the Office of the Chief Engineer for final distribution to the Contractor. Shop and /or working drawings, which are not approved by the Office of the Chief Engineer, will be returned to the DE for further review.

- The DE shall also review and recommend for approval all shop and/or working drawings, including supporting calculations, for items of work that were presented in the Contract documents as "conceptual", including temporary works for which the Contractor is required to complete the final design, erection plans, and demolition These shop and/or working drawings, including supporting calculations, must be reviewed to a level where the DE has taken no exceptions to the drawings and supporting calculations before they can be stamped "Recommended for Approval" using Stamp B shown in Exhibit 3-8. Submissions stamped as "Recommended for Approval" shall be returned to the Authority for approval by the Office of the Chief Engineer of the New Jersey Turnpike Authority. Where the Office of the Chief Engineer deems the submitted shop and/or working drawings acceptable, they will be stamped as 'Approved' by an authorized representative of the Chief Engineer using Stamp C as shown in Exhibit 3-8. Approved shop and/or working drawings will then be returned to the CM by the Office of the Chief Engineer for final distribution to the Contractor. Shop and /or working drawings, which are not approved by the Office of the Chief Engineer, will be returned to the DE for further review.
- The CM will review and approve Contractor submissions in accordance with a Project Specific Materials Acceptance Review Matrix, which will be developed by the DE during Design and provided to the CM for review and acceptance prior to the Pre-Construction meeting for the contract. The CM will also be responsible for review and approval of shop drawings for all items, which are covered by Authority Standard drawings and do not require explicit design on the part of the contractor. All reviewed shop drawings shall be stamped by the CM using Stamp A shown in Exhibit 3-8.
- A sample matrix of DE and CM responsibilities for review of Contractor Submissions has been prepared as the Materials Acceptance Criteria Matrix (Matrix) as shown in Exhibit 3-9. An electronic spreadsheet version of the Matrix (Exhibit 3-9) will be furnished to the DE by the Authority Project Engineer as part of the Project Design kick-off meeting. This matrix is provided as an example and shall be modified by the DE as appropriate based on specific contract requirements and provided with the Design Phase C submission. This Matrix shall be made available for the scoping and procurement of CM services. A Pre-construction handoff meeting shall be scheduled between the DE and CM to review the design aspects of the project and finalize the Matrix. The Matrix will be updated by the DE and provided to the CM prior to the Pre-Construction meeting for

the contract. For the purposes of clarity, the 'Reviewer' shown in the matrix is the party responsible (CM or DE) for review of Contractor submitted materials. Where 'CM/DE' is shown, the Construction Manager shall bear primary responsibility for review of these Contractor submitted materials with assistance and additional review provided by the DE as required for specialty or unusual work features. Where 'DE/CM' is shown, the Design Engineer shall bear primary responsibility for review of these Contractor submitted materials with assistance and additional review provided by the CM as required for features where complex or unusual field performed procedures are to be executed. In any event, where both CM and DE parties are shown in the 'Reviewer' column, both parties shall review the Contractor submitted materials.

#### 3.4.6.4 Requests for Information

During the course of construction, the Resident Engineer may forward to the Engineer a Request for Information (RFI). To prevent costly construction delays, the Engineer shall expeditiously prepare a response to the Resident's question.

#### 3.4.6.5 As-Built Plans

The preparation of As-built plans shall be the responsibility of the Resident Engineer. The Phase "D" submission to the Authority's Engineering Department includes the drawings in individual PDF Files with signature and MicroStation Format, which will be forwarded to the Resident. If necessary, the NJTA Engineer shall forward any changes-of-plan in PDF and MicroStation Format that may have occurred during the course of construction to the Resident Engineer.

As contracts are ready to be finalized for As-built revisions, the Original Title Sheet Mylar with the Design Engineer and Chief Engineer's signatures and a CD of Electronic Files in PDF and MicroStation Format will be transmitted to the Resident Engineer. This can be picked-up at the Authority's reception desk in the lobby when available.

Submission of Final As-built Mylar Drawings and corresponding Electronic Files shall be delivered to Tony Valte, Assistant Project Supervisor with a transmittal containing the following enclosures:

- 1. One (1) Set of *Final* As-Built Mylar Drawings sized at 22" X 36" *and shall contain the following:* 
  - a.) Title Sheet must be the Original Title Sheet as provided with the Design Engineer and Chief Engineer's signature.
  - b.) Title Sheet must be dated and Stamped "AS-BUILT," signed and dated by the Resident Engineer. The Resident Engineer's Certification Stamp shall state: "I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS CONTRACT HAS BEEN CONSTRUCTED

- IN CONFORMITY WITH THE ORIGINAL PLANS, SPECIFICATIONS AND MODIFICATIONS, AS IDENTIFIED HEREIN AS-BUILT."
- c.) All other sheets must be stamped "AS-BUILT" on top of the TITLE BLOCK or REVISION BOX. Note: The text "AS-BUILT" shall be shown with a bold face font at a one-half inch text height on the Title Sheet above the signatures and above all Title Blocks on all other drawings.
- d.) The REVISION BOX must have the following information:
  - 1st Column (REV.) shall denote a number inside a triangle to indicate the number of times the sheet was revised.
  - 2nd Column (DESCRIPTION) shall denote either "ADDENDUM NO." "COP NO." or "AS-BUILT"
  - 3rd Column (DATE) shall denote date ADDENDUM, COP OR "AS-BUILT" of sheet completed.
  - 4th Column (BY) shall denote initials of DRAFTER.
  - 5th Column (CHK) shall denote initials of Resident Engineer.
- 2. One (1) CD of Individual and combined Electronic Files in PDF Version with all required signatures and MicroStation Format. Electronic Files shall contain the same information above.
- 3. One (1) half-size bound set of As-Built prints and shall contain the same information above.

#### 3.4.6.6 Lighting System

After the lighting system has been constructed, the Engineer shall perform a verification of the lighting installation, to ensure that the lighting has been installed according to the approved design. This procedure is outlined in Section 7 (Lighting and Power Distribution Systems) of the Design Manual, and will be required before the Authority's Engineering Department issues final acceptance for any lighting system.

# Exhibit 3 - 5 Design Element Modification Request

CONTRACT NO	
PHASE	
DATE	

DESIGN ELEMENT	DESIGN CRITERIA		APPROXIMATE COST		
	DESIRABLE	MINIMUM	PROPOSED	DESIRABLE	PROPOSED
RAMP RADIUS	235'	150'	180'	\$1,250,000	\$250,000

<sup>\*</sup> PROVIDE GENERAL LAYOUT SKETCH(S) OR CORRESPONDENCE AS APPROPRIATE

#### **IMPACTS/REASONS**:

Providing the desirable radius requires the total acquisition of a small commercial property. Reducing the radius eliminates the total acquisition and only requires a slope easement.

DECEMBER 2007 3 - 22

#### Exhibit 3 - 6

### **Summary of Permit Requirements**

#### SUMMARY OF PERMIT REQUIREMENTS

CONTRACT NO
DIACE
PHASE
DATE

AGENCY	TYPE OF PERMIT	REASON FOR PERMIT	STATUS
NJDEP	GENERAL WETLANDS	BRIDGE PIER IMPACTS TRANSITION AREA	PREPARING INITIAL
			DRAFT FOR REVIEW

MAY 2007 3 - 23

# Exhibit 3 - 7 Environmental Permits

#### **FEDERAL**

U.S. Coast Guard (Bridge)
USCOE Section 404 (Individual/Nationwide) discharge of fill
USCOE Section 10 (Navigable Waters)
Section 7 (Endangered Species Consultation)

#### **STATE**

Coastal Area Facility Review Act Hazardous Waste Site Investigation NJDEP Tidal Wetlands NJDEP Waterfront Development NJDEP Tidal Conveyance NJDEP Freshwater Wetlands NJDEP Flood Hazard/Riparian NJDEP Water Quality Certificate

#### **OTHERS**

Delaware Basin Commission
Meadowland Commission
Pineland Commission
Historic Sites Council
Green Acres/State House Commission
NJ No Net Loss Reforestation Act
State Agricultural Development Commission

MAY 2007 3 - 24

# Exhibit 3 - 8 Shop and Working Drawing Stamps

## Stamp A

SHOP DRAWIN CONSULTAN	
Review is for general compliance sole responsibility for correctne quantities, and safety during fab remain with the Contractor.	ess of dimensions, details,
☐ No Exceptions Taken	
☐ Make Corrections Noted	
☐ Amend and Resubmit	B∨
Rejected	Date

# Stamp B

1	The Engineer, in accordance with NJTA standards, has reviewed this submission, which the Contractor has developed as the Final design of conceptual plans as shown or required in the Contract Documents, or temporary works required to perform the Work described or as required in the Contract Documents, for general compliance with the design concept and criteria.
	RECOMMENDED FOR APPROVAL
	0a+e
	This does not relieve the Contractor from compliance with the requirements

## Stamp C

APPROVED	
By Date	
Office of The Chief Engineer	

Exhibit 3 - 9
Material Acceptance Criteria Matrix

Pay Item  Pay Unit  Standard Specification  Description  Description  Description  Description  Description  Description  Conformance  Shop Drawings  Mix Design  QC Plan  Mill Certifications of  Compliance  Compliance  Receiving Tickets	r (CM or e Page e Std Sup
	Reviewer (CM or DE) Reference Page No. in the Std Spec or Sup Specs
1D01HDS Historic District Sign Each Historic District Sign	CM
1D01LAY Construction Layout LS Control of Work	CM 36
1D10MOB Mobilization LS Control of Work	CM 37
1G01SCH Progress Schedule (This is a no Bid Item) LS Prosecution and Progress	CM 74
Fuel Price Adjustment (This is a NO BID, Lump Sum item for this contract. The Lump Sum price is \$XXX,000. Enter a Unit Price of \$XXX,000 as your bid item for this	
1HFPXXX item.) L.S. Price Adjustment	CM SS
2A01CAG Clearing and Grubbing ACRE Clearing & Grubbing x	CM 95, 763
2A06CAG Sealing of Abandoned Well Each Sealing of Abandoned Well	CM SS
2A08CAG         Monitoring Well         x	CM SS
2B00001 Basin and Swale Excavation C.Y. Basin and Swale Excavation	CM SS
2B02REX Roadway Excavation, Earth C.Y. Roadway Excavation X X X	CM 101
2B04REX Roadway Excavation and Embankment C.Y. Roadway Excavation x x x x	CM 101
2B05REX Roadway Excavation, Muck C.Y. Roadway Excavation x x x x	CM 101
2B15STS Stripping Topsoil C.Y. Roadway Excavation x x x	CM 101
2B200VR         Overload Removal         C.Y.         Roadway Excavation         x	CM 101
2C00001 Deep Benchmarks L.F. Deep Benchmarks	CM
2C00002 Open Standpipe Piezometers Each Piezometers	CM
2C00005 Clay Liner C.Y. Embankment x x x x x x x	CM SS
2C00006 Vertical Wick Drain Obstruction Clearance L.F. Embankment x x x x	CM SS
2C00007 Sand Blanket C.Y. Embankment x x x x x x	CM SS
2C00008 #57 Stone Backfill C.Y. Embankment x x x x x x x	CM SS
2C00011   Geofoam Backfill   C.Y.   Embankment   x   x   x   x   x   x   x   x   x	CM SS
2C00012 Geosynthetic Clay Liner S.Y. Embankment x x x x x x x	CM SS
2C01EMB Embankment, Common C.Y. Embankment x x x x	CM 108
2C02EMB Embankment, Grade A C.Y. Embankment x x x x x x x	CM 105, 626
2C03EMB         Embankment, Grade B         C.Y.         Embankment         x         x         x         x         x         x	CM SS
2C04EMB         Porous Fill         C.Y.         Embankment         x	CM 103
2C07EMB         Embankment, Grade C         C.Y.         Embankment         x         x         x         x         x         x	CM SS
2D00001         Cofferdam         L.S.         Cofferdam         x	DE SS
2D01CEX Channel Excavation C.Y. Channel Excavation x	CM SS
2E01CAL Coarse Aggregate Layer C.Y. Foundation Excavation x x x	CM 113
2E01FEX         Foundation Excavation         C.Y.         Foundation Excavation         x   <t< td=""><td>CM 113</td></t<>	CM 113
2F01TEX Trench Excavation, Extra Depth C.Y. Trench Excavation x x x x x x x x x	CM SS
2F04TEX Trench Excavation, Electrical L.F. Trench Excavation x x x x x x x x x x	CM SS
2G00001 Riprap and Scour Holes Ton Stone for Erosion Control x x x x x x	CM 120
2G00002 Riprap Stone Slope Protection, 12" Thick, (D50=6") Ton Stone for Erosion Control x x x x x x	CM 120
2G00005         Riprap Stone Aprons, 18" Thick, (D50=9")         Ton         Stone for Erosion Control         x         x         x         x	CM 120
2G00008 Riprap Stone Ditch Protection, 18" Thick (D50=6") Ton Stone for Erosion Control x x x x x x x	CM 120
2G00009         Gabions         C.Y.         Stone for Erosion Control         x         x         x         x	CM SS
2G00010 Gabion Mattress Slope Protection, 12" Thick C.Y. Stone for Erosion Control x x x x x x	CM SS
2G00011 Gabion Mattress Ditch Protection, 12" Thick C.Y. Stone for Erosion Control x x x x x	CM SS
2G00016         Riprap Stone Slope Protection, 24" Thick (D50=12")         Ton         Stone for Erosion Control         x         x         x	CM 120
2G00021         Riprap Stone Slope Protection, 24" Thick (D50=8")         Ton         Stone for Erosion Control         x         x         x	CM 120
2G00022 Riprap Stone Scour Hole, 12" Thick, D50=6" Ton Stone for Erosion Control x x x x   x   x	CM 120

Exhibit 3 - 9

Material Acceptance Criteria Matrix

<u>.</u>						Τ	Т	Τ	Τ	Τ	Τ,		,		
Number								إ	2		Mill Certifications	ō	Tickets	ō	9
1 2	r		Standard Specification Description			þ	Conformance Other	o i	Mix Design		ati	Certifications of	ic le	Reviewer (CM DE)	Page Std up
0	القوم ع	_	igiti d			900	Jan	lan	2   <u>2</u>		lific	itio	o o	٦	Ses
Spec	Item cription	Unit	ific ript	é	g	6	Ľ.		s s	a	P	100	를 <u>ই</u>	N N	s of the
Ę	Pay Item Descripti	کر ا	and secion secio	Source	Testing	Division	Per	کا ک	Mix Design	ac Plan		Ħ	Compliand	ž iš	Reference Pa No. in the Std Spec or Sup Specs
Item	Pa	Pay	S O O	ŝ	e	á	<del>o</del> c	O d	) <u>E</u>	ğ	Σ	ပိ	S &	8 0	S S S S S
2G00024	Gabion Mattress Ditch Protection, 18" Thick	C.Y.	Stone for Erosion Control											CM	
	Riprap Stone Ditch Protection, 18" Thick, D50=9"	Ton	Stone for Erosion Control	χ	χ	)	<b>x</b>						X	CM	120
	Sand Layer, 6" Thick	S.Y.	Stone for Erosion Control				_	1	4			_	_	CM	
	Riprap Stone Aprons, 36" Thick, D50=18"		Stone for Erosion Control	χ	χ	_	_	_	_		_	_	Х	CM	120
	Riprap Stone Aprons, 48" Thick, D50=24"	Ton	Stone for Erosion Control	χ	χ	_	_	1			┸		Х	CM	SS
	Gabion Mattress Ditch Protection, 24" Thick	C.Y.	Stone for Erosion Control	χ	χ	)	_	$\perp$	_	_	1	_	Х	CM	SS
	Riprap Stone Ditch Protection, 24" Thick, D50=12"	Ton	Stone for Erosion Control	χ	χ		_	+	4	_	╀	4	X	CM	120
	Riprap Stone Slope Protection, 18" Thick, (D50=5")	Ton	Stone for Erosion Control	χ	χ			_			-	-	Х	CM	120
	Riprap Stone Scour Hole, 18" Thick, D50=9"	Ton	Stone for Erosion Control	χ	χ	)	_	+	+	+	╀	+	X	CM	120
	Riprap Stone Scour Hole, 24" Thick, D50=12"	Ton	Stone for Erosion Control	χ	χ	_	_	+	+	+	+	+	X	CM	120
	Gabion Mattress Scour Hole, 24" Thick	C.Y.	Stone for Erosion Control	Х	Х	_	_	+	+	+	+	+	X	CM	00
	Riprap Stone Scour Hole, 36" Thick, D50=18"	Ton	Stone for Erosion Control	χ	χ	-	_	+	+	+	+	+	X	CM	SS
	Gabion Mattress 9" x 6' x 9'	Ton	Stone for Erosion Control	χ	Х	_	_	+	+	+	+	+	X	CM	SS
100 Bi 100 B 200 B 200	Stone, Grade B	Ton	Stone for Erosion Control	Х	Х	_	_	+	+	+	+	+	X	CM	100
	Stone, Grade D Filter Blanket	Ton	Stone for Erosion Control Stone for Erosion Control	X	X	+	_	+	+	+	+	+	X	CM	120 SS
	Riprap Stone Aprons, 12" Thick (D50=6")	Ton Ton	Stone for Erosion Control	X	X	_	_	+	+	+	+	+	X	CM	120
	Riprap Stone Aprons, 12 Thick (D50=6)  Riprap Stone Aprons, 24" Thick (D50=12")	Ton	Stone for Erosion Control	X	X	1	(	+	+	+	+	+	X	CM	120
	Riprap Stone Ditch Protection, 12" Thick, D50=6"	Ton	Stone for Erosion Control	X	Х	_	_	+	+	+	+	+	X	CM	120
	Riprap Stone Aprons, 16" Thick, D50=8"	Ton	Stone for Erosion Control	Х	Х	-	<u> </u>	+	+	+	+	+	X	CM	120
2H00001	Temporary Slope Drain	L.F.	Temp Soil Erosion & Dust Control	-	^	+	+	+	,	+	+	+	-	CM	SS
2H00001	15" Temporary Slope Drain	L.F.	Temp Soil Erosion & Dust Control	X		+	+	+ ;	_	+	+	+	X	CM	SS
2H00004 2H00005	18" Temporary Slope Drain	L.F.	Temp Soil Erosion & Dust Control	X		+	+	_	(	+	+	+	X	CM	SS
	Heavy Duty Silt Fence, Orange	LF.	Temp Soil Erosion & Dust Control	Х		+,	x	+	+	+	+	+	X	CM	126
2H00007	Heavy Duty Silt Fence, Black	I F	Temp Soil Erosion & Dust Control	χ		-	X T	+	+	+	+	+	T <sub>X</sub>	CM	126
	Storm Sewer Inlet Protection	Each	Temp Soil Erosion & Dust Control	Х		+	x	+	<del>,   -</del>	+	+	+	T <sub>X</sub>	CM	SS
100 100 100 100	Sediment Containment Bags	Each	Temp Soil Erosion & Dust Control	Х		+	x	_	(	+	$^{+}$	+	X	CM	SS
	Concrete Driveway, 6" Thick	S.Y.	Temp Soil Erosion & Dust Control	Х		-	x	1	_		t	+	X	CM	SS
		S.Y.	Temp Soil Erosion & Dust Control	χ		_	x	)	_	1		$\top$	X	CM	SS
	Stone Deck Dam	C.Y.	Temp Soil Erosion & Dust Control	χ		+	x	_	(		T	$\top$	Х	CM	SS
	Floating Sediment Risers	Each	Temp Soil Erosion & Dust Control	χ		_	x	,	_			T	Х	CM	SS
2H00015		S.Y.	Temp Soil Erosion & Dust Control	χ		_	x	_	(	T	T		Х	CM	SS
2H00016	Inlet Filter, Type 2	Each	Temp Soil Erosion & Dust Control	χ		1	x	٦,	<i>(</i>		T	T	Х	CM	SS
2H00018	Sediment Control Bags	Each	Temp Soil Erosion & Dust Control	χ		)	x	)	(			T	Х	CM	SS
2H01DSC	Temporary Seeding	S.Y.	Temp Soil Erosion & Dust Control	χ		)	x	)	(				Х	CM	SS
2H05DSC	Watering		Temp Soil Erosion & Dust Control	χ			)						Х	CM	SS
	Temporary Stone, Grade B	Ton	Temp Soil Erosion & Dust Control	χ		)	X						χ	CM	631
2H25TEC	Hay Bales	C.Y.	Temp Soil Erosion & Dust Control	χ		)	X						Х	CM	122
	Silt Fence	L.F.	Temp Soil Erosion & Dust Control	χ		)	X		╧	L			Х	CM	SS
2H35TEC	Floating Turbidity Barriers	LF	Temp Soil Erosion & Dust Control	χ		)	X			L			Х	CM	SS
2H40TEC	Inlet Filters	Each	Temp Soil Erosion & Dust Control	χ		)	x		$oldsymbol{ol}}}}}}}}}}}}}}}}$				Х	CM	126
	Construction Driveway	Ton	Temp Soil Erosion & Dust Control	χ			x						Х	CM	SS
	Demolition of Existing Structures	LS	Demolition of Existing Structures				T	)	_					DE	129
	Demolition of Existing Toll Plaza		Demolition of Existing Structures			L	1	()		L	L	_		DE	129
2K01TPF	Temporary Orange Plastic Fence	L.F.	Tem.Orange Plastic Fence		_	_	<u> </u>	_	$\perp$	_		Х	_	CM	SS
2L01SBB	Subbase	CY	Subbase	χ	χ	)	( <u> </u>						X	CM	SS

Exhibit 3 - 9

Material Acceptance Criteria Matrix

		_		_	_	_	_			_	_	_			
Item Spec Number	Pay Item Description	Pay Unit	Standard Specification Description	Source	Testing	Division 900 -	Other Conformance	Shop Drawings	Mix Design	QC Plan		Certifications of Compliance	Receiving Tickets	Reviewer (CM or DE)	Reference Page No. in the Std Spec or Sup Specs
2L02SSC	Sawcutting	LF	Sawcutting	X	χ	X		0,	_	۲	-	00	Х	CM	SS
2M00001	Stone Columns	LF	Stone Columns	~			χ	χ		χ			χ	DE	SS
2M00002	Pre-Drilling	LF	Pre-Drilling				Х	Х		Х			χ	CM/DE	SS
2M00003	Vibration and Movement Monitoring	L.S.	Vibration and Movement Monitoring				Х	χ		χ			Х	DE/CM	SS
2M00004	Reno Mattress (Gabion Basket)	C.Y.	Reno Mattress (Gabion Basket)				Х	χ		χ			Х	CM	SS
2M00006	Excavation, Acid Producing Soil	CY	Excavation, Acid Producing Soil				Х	χ		Х			Х	CM	SS
2M00007	Acid-Producing Soils Remediation	SY	Acid-Producing Soils Remediation				Х	χ		Х			Х	CM	SS
2M00008	Disposal of Acid Producing Soil	Ton	Disposal of Acid Producing Soil				Х	Х		Х			Х	CM	SS
2M00009	Testing for Acid Producing Soil Deposits	Each	Testing for Acid Producing Soil Deposits				X	X		Х			Х	CM	SS
	- County for the county of the county		Tooling for road for a second												
2M00010	Foundation Excavation for Acid Producing Soils	C.Y.	Foundation Excavation for Acid Producing Soils				X	Х		Х			X	CM	SS
2M00011	Testing of Soils for Waste Classification	Each	Testing of Soils for Waste Classification				Х	Х		Х			Х	CM	SS
2N00002	Geotechnical Instrumentation Monitoring	Week	<u> </u>				Х			Х				CM	SS
2N00006	Vibrating Wire Piezometers	Each					Х			Х				CM	SS
2N00007	Trench Excavation, Cut-Off Wall	S.F.	Trench Excavation, Cut-Off Wall				Х			Х				CM	SS
2N00008	Exploratory Test Pits	Each	Exploratory Test Pits				Х			Х				CM	SS
2000006	Tile Drain Plugging	Each					χ			χ				CM	SS
2000007	Tile Drain Exploration	L.F.	Tile Drain Exploration				Х			X				CM	SS
2P00001	Demolition of Building Lot # X	LS	Demolition of Buildings					χ		χ				DE	SS
2P00004	Asbestos Abatement# X	LS	Asbestos Abatement					Х		Х				DE	SS
2P00010	Demolition of Building Lot # X	LS	Demolition of Buildings					Х		Х				DE	SS
3A00001	Aggregate Base Course, 7" Thick	SY	Aggregate Base Course	χ	χ	χ		Ť		<u> </u>			χ	CM	133-135
3B01ABC	Asphaltic Base Course 25H64	Ton	HMA Pavements	X	Х	Х			Х	Х		Х	X	CM	SS
3B01AIC	Asphaltic Intermediate Course 19H76	Ton	HMA Pavements	Х	χ	χ			Х	Х		Х	Х	CM	SS
3B01ASC	Asphaltic Surface Course 12.5H76	Ton	HMA Pavements	Х	χ	Х			Х	Х		Х	Х	CM	SS
3В03НМА	HMA Surface Course, Mix I-5	Ton	HMA Pavements	Х	χ	Х			Х	χ		Х	Х	CM	SS
3B14HMA	Hot Mix Asphalt Driveway, 6" Thick	S.Y.	HMA Pavements	Х	Х	χ			Х	Х		Х	Х	CM	SS
3B15HMA	Hot Mix Asphalt, Driveway, 4" Thick	S.Y.	HMA Pavements	Х	Х	Х			Х	Х		Х	χ	CM	SS
3B16HMA	Hot Mix Asphalt, Driveway, 12" Thick	S.Y.	HMA Pavements	Х	χ	Х			Х	χ		Х	χ	CM	SS
3B21HMA	HMA Base Course, Mix I-2	Ton	HMA Pavements	Х	χ	Х			Х	Х		Х	χ	CM	SS
3B21SUP	Superpave Hot Mix Asphalt 25H 64 Base Course	Ton	HMA Pavements	Х	χ	Х			Х	Х		Х	χ	CM	135-178
3B23SUP	Superpave Hot Mix Asphalt 19M 64 Base Course	Ton	HMA Pavements	Х	χ	Х			χ	χ		Х	χ	CM	135-178
3B24SUP	Superpave Hot Mix Asphalt 19H 76 Intermediate Course	Ton	HMA Pavements	Х	χ	Х			χ	Х		Х	χ	CM	135-178
3B250APA	Asphalt Price Adjustment. (This is a NO-BID, Lump Sum item for this contract. The	Ton	Asphalt Price Adjustment (This is a No-Bid Item)											CM	176
3B25SUP	Superpave Hot Mix Asphalt 12.5H 76 Surface Course	Ton	HMA Pavements	Х	χ	χ			χ	χ		Х	Х	CM	135-178
3B26TAC	Tack Coat	Gallor	HMA Pavements	Х		χ				Г		Х	Х	CM	135-178
3B31SUP	Superpave Hot Mix Asphalt 12.5M64 Surface Course		HMA Pavements	Х	χ	χ			χ	χ			Х	CM	135-178
3B31CLS	Clean Outside Shoulders	L.F.	Clean Outside Shoulders	Х		χ						Х	Х	CM	SS
3B33SUP	Superpave Hot Mix Asphalt 19H 64 Intermediate Course	Ton	198 A 2 3 3 3	χ	χ	χ			χ	χ		Х	χ	CM	135-178
3B34SUP	Superpave Hot Mix Asphalt 25H 64 Base Course	Ton	HMA Pavements	χ	χ	χ			χ	χ		Х	χ	CM	135-178
3B35SUP	Superpave Hot Mix Asphalt 9.5M 64 Surface Course		HMA Pavements	Х	χ	χ			Х	_		Х	Х	CM	135-178
3B36SUP	Superpave Hot Mix Asphalt 19M76 Base Course	Ton	HMA Pavements	χ	χ	χ			χ	χ		Х	χ	CM	SS
3B41ABS	HMA Bridge Surfacing	Ton	HMA Pavements	Χ	χ	χ			χ	χ		Х	Χ	CM	135-178
3B42ASB	Membrane Waterproofing	SY	HMA Pavements	χ		χ						Х	χ	CM	135-178
3B450APA	Asphalt Price Adjustment (This is a NO-BID, Lump Sum item for this contract. The	L.S.	HMA Pavements	Х		χ						Χ	Χ	CM	176
3C01BRS	Berm Surfacing, 3 inches Thick	SY	Shoulder & Berm Surfacing	Х		Х							Χ	CM	179

Exhibit 3 - 9

Material Acceptance Criteria Matrix

Item Spec Number	Pay Item Description	Pay Unit	Standard Specification Description	Source	Testing	Division 900 - Conformance	Other	Shop Drawings	Mix Design	QC Plan	Mill Certifications	Certifications of Compliance	Receiving Tickets	Reviewer (CM or DE)	Reference Page No. in the Std Spec or Sup Specs
3C02BRS	Berm Surfacing, Crushed Stone, 6" Thick	SY	Shoulder & Berm Surfacing	χ		χ							χ	CM	179
3D00001	Concrete Base Course, 8" Thick	S.Y.	Portland Cement Conc Pavement	χ	χ	χ		χ	χ	χ	Х		χ	CM	SS
3D01UPR	Underlayer Preparation	S.Y.		χ	χ	Χ		χ	χ	χ	χ		χ	CM	SS
2000 0000000000000000000000000000000000	Bridge Approach Slab	S.Y.	Portland Cement Conc Pavement	χ	χ	Х		Х	Х	χ	Х		χ	CM	179-206
	Pavement Removal, 2" Depth	S.Y.	Pavement Removal & Surface Milling				χ							CM	208
	Pavement Removal, 3" Depth	S.Y.	Pavement Removal & Surface Milling				χ							CM	208
3E14PMR	Pavement Removal, 5" Depth	S.Y.	Pavement Removal & Surface Milling				χ							CM	208
3E15PMR	Pavement Removal, 4" Depth	S.Y.	Pavement Removal & Surface Milling				χ							CM	208
3E20PMR	Pavement Removal, Varible Depth	S.Y.	Pavement Removal & Surface Milling				Χ				L			CM	208
	Surface Milling	S.Y.	Pavement Removal & Surface Milling				χ				L			CM	208
	Surface Milling, 2" Average Depth	S.Y.	Pavement Removal & Surface Milling				χ							CM	208
	Surface Milling, 3" Average Depth	SY	Pavement Removal & Surface Milling				χ							CM	208
The Res (1997)	Milled Rumble Strip	LF	Milled Rumble Strip				χ							CM	209
4A00004	Concrete Collar	Each	Concrete Structures	χ	χ	Χ		χ	Χ	χ	_		χ	CM	SS
4A00005	Concrete In Culvert	CY	Concrete Structures	χ	χ	Х		χ	Х	χ	_		Χ	CM	221-274
	Precast Reinforced Concrete 3-Sided Box Culvert	LF	Concrete Structures	χ		Х		χ	Χ	χ	Х		χ	DE	221-274
4A00009	Pier Protection Barrier	LF	Concrete Structures	χ	χ	Х		χ	Х	χ			χ	CM	SS
4A00014	Concrete In Pylon Wall	C.Y.	Concrete Structures	χ	χ	Х		Х	Х	χ	<u> </u>		χ	CM	SS
	Concrete In Pile Cap	C.Y.	Concrete Structures	χ	χ	Х		χ	Х	χ	₩		Х	CM	SS
	Concrete In Wingwalls	C.Y.	Concrete Structures	χ	χ	X		χ	Х	χ	<u> </u>		Χ	CM	SS
	Modular Expansion Joint, 6" Movement	L.F.	Concrete Structures		Χ		X	_		_	<u> </u>		Χ	DE	SS
	Strip Seal Expansion Joints, 2" Movement	L.F.	Concrete Structures		Х		Х	_			-		Х	CM	SS
4A00025	Neoprene Strip Seal	L.F.	Concrete Structures		Х		X	-			┢		X	CM	SS SS
4A00026	Jeene Seal Expansion Joints, 2" Movement	L.F.	Concrete Structures	-	Х	100	χ				<u> </u>		χ	CM	
4A00027	Concrete In Wall Facing	C.Y.	Concrete Structures	χ	X	X		Х	X	X	<u> </u>		χ	CM	SS SS
4A00028	Concrete In Barriers	C.Y.	Concrete Structures	X	Х	X		Х	X	X	┢		Х	CM	SS
4A01CCC 4A01CCS	Concrete in CIP Collar	C.Y.	Concrete Structures	χ	X	Х		χ	X	χ	┢		Х	CM	SS
4A01CCS 4A01CSH	Concrete Core Sampling Concrete in Structure, Headwalls	Each C.Y.	Concrete Structures Concrete Structures	V	X	v	Χ	, v	v	1/	<u> </u>		X	CM	SS
	Strip Seal Expansion Joint	L.F.	Concrete Structures	Χ	Х	Х		Χ	Х	Χ	$\vdash$		χ	CM	00
	Concrete In Substructure Above Footings	CY	Concrete Structures	Х	Х	Х		Х	Х	Х			χ	CM	221-274
	Concrete In Sousingular Above Footings	CY	Concrete Structures	Х	Х	Х		X	Х	Х			χ	CM	221-274
4A09STC	Concrete in Poolings  Concrete in Backwall	C.Y.	Concrete Structures	Х	X	χ		χ	Х	Х			χ	CM	SS SS
	Concrete in Abutment Above Footings	C.Y.	Concrete Structures	^	^	^		<del>  ^</del>	_	^	$\vdash$		^	CM	00
4A10COP	Concrete in Coping	C.Y.	Concrete Structures	χ	Х	χ		χ	Х	χ	<u> </u>		Х	CM	SS
4A10PAF	Concrete in Pier Above Footings	C.Y.	Concrete Structures	Λ	_	^		<u> </u>	_	_	$\vdash$		^	CM	
	Reinforcement Steel		Concrete Structures	χ		Х		Y	¥	χ	¥		χ	DE	221-274
	Concrete in Retaining Walls Above Footings	C.Y.	Concrete Structures	Λ		<u> </u>		^	<u> </u>	Α	<u> </u>		^	CM/DE	
4A10STC	Concrete In Bridge Parapet	CY	Concrete Structures	χ	χ	Х		Х	χ	χ	T		х	CM/DE	221-274
	Concrete In Deck Slabs		Concrete Structures		<u> </u>	-		Ë	-	<u> </u>	T			CM	
	Reinforcement Steel, Epoxy Coated		Concrete Structures	χ		Х		χ	Х	Х	Х		Х	DE	221-274
	Reinforcement Bar Coupler	_	Concrete Structures	Х		Х		Х	X	X	_	П	Х	CM	SS
	Drill and Grout Reinforcement Bar		Concrete Structures	χ		Х	t	χ	X	_	-		Х	CM	221-274
	Mechanical Coupler	_	Concrete Structures	Х		Х		Х			Ť		Х	CM	SS
4A55CPS	Concrete Penetrating Sealer Treatment	SF	Concrete Structures	χ	χ	Х					T		Х	CM	274
	Presstressed Concrete Beams, Type VI	L.F.	Presstressed Concrete Beams, Type VI			χ							х	DE	SS
					_	_		•	_	•	_	_	-		

Exhibit 3 - 9

Material Acceptance Criteria Matrix

Item Spec Number	Pay Item Description	Pay Unit	Standard Specification Description	Source	Testing	Division 900 -	Other	Shop Drawings	Mix Design	QC Plan	Mill Certifications	Certifications of Compliance	Receiving Tickets	Reviewer (CM or DE)	Reference Page No. in the Std Spec or Sup Specs
	Prestressed Concrete Bulb Tee Beams, 55 Inches Deep		Prestressed Concrete Bulb Tee Beams, 55 Inches	•	<u> </u>	x		· ·	Ē	Ť	_	-	х _	DE	SS
4B00007	Prestressed Concrete Adjacent Box Beams, 27" X 48"	L.F.	Prestressed Concrete Adjacent Box Beams, 27" X			Х							Х	DE	SS
4C01HMR	HLMR Bearings, 200 Kips to 450 Kips, Type E	Each	Steel Structures			Х		Х		χ	Х		Х	DE	284-296
4C01SSC	Shear Connectors		Steel Structures			X		Х		Х	Х		Х	DE	284-296
4C05SSL	Structural Steel	L.S.	Steel Structures			Х		Х		Х	Х		Х	DE	SS
4C15SDJ	Structural Steel Deck Joints	L.S.	Steel Structures			Х		Х		Х	Х		Х	DE	284-296
4D10TTS	Treated Timber Structures	MFBM	Timber Structures			Х		Х					Х	DE	SS
4E00011	HP 12 X 53 Test Piles	L.F.	Piles	χ	χ	Х	Х	Х		Х			Х	DE	301-315
	Driving HP 14 X 89 Piles	L.F.	Piles		Х			Х		Х		Х		DE	301-315
	Steel HP 14 X 89 Test Piles		Piles	χ	χ	Х	Х	χ		Х			Х	DE	301-315
4E00017	Splices For Steel Hp 14 X 89 Piles	Each	Piles	χ		Х	Х	Х				Х	Х	DE	301-315
4E00019	Furnishing HP 14 X 89 Piles		Piles	χ		Х	Х	Х		Х			Х	DE	301-315
4E00026	14 Inch Diameter Steel Pipe Test Piles	LF	Piles	χ		Х	χ	χ		χ			χ	DE	301-315
4E00027	Point Reinforcement For 14 Inch Diameter Steel Pipe Piles	Each	Piles	χ		Х	χ	χ		χ			χ	DE	301-315
4E00028	Splices For 14 Inch Diameter Steel Pipe Piles	Each	Piles	χ		Х	Χ	χ		Χ			χ	DE	301-315
4E00029	Splices For Steel Hp 12 X 53 Piles	Each	Piles	χ		Х	Χ	χ				χ	χ	DE	301-315
4E00030	Furnishing 14" Diameter Steel Pipe Piles	LF	Piles			Х	χ	χ		Х			Х	DE	301-315
4E00031	Driving 14" Diameter Steel Pipe Piles	LF	Piles		χ			χ		Х		χ	П	DE	301-315
	Driving 16" Cast-In-Place Concrete Piles	L.F.	Piles		χ			χ		χ		χ	П	DE	301-315
4E00053	Splices for 16" Cast-In-Place Concrete Piles	Each	Piles	χ		Х	χ	χ				Χ	χ	DE	301-315
4E00054	Furnishing 16" Cast-In-Place Concrete Piles	L.F.	Piles	χ		Х	χ	χ		Х			Х	DE	301-315
4E00058	16" Cast-in-Place Concrete Test Piles	L.F.	Piles	χ	χ	Х	χ	χ		χ			χ	DE	301-315
4E01EDP	Furnishing Equipment for Driving Piles	LS	Piles	χ			Х	χ		Х			Х	DE	301-315
4E01FIP	Furnishing and Installing W18 x 86 Piles	LS	Piles	χ		Χ	Χ	χ		Χ			χ	DE	SS
	Dynamic Pile Load Tests	Each	Piles				χ	χ						DE	308
	Protective Pile Coating	L.F.	Piles	Χ		Х						Χ	Χ	DE	SS
4E30SPC	30" Diameter Steel Pipe Casing	L.F.	Piles	χ	χ	χ	Χ	χ		Χ			χ	DE	SS
4F00008	Remove Existing Span Sign Structure No.	LS	Sign Support Structures		Χ			Χ		Χ				CM/DE	315-328
4F00009	   Fabrication and Delivery of Overhead Butterfly/Cantilever Sign Support Structure Post	Pound	Sign Support Structures	Х	Х	X		X		Х	Х			DE	315-328
	Fabrication and Delivery of Overhead Butterfly/Cantilever Sign Support Structure														
4F00010	Truss	Pound	Sign Support Structures	χ	Х	Х		χ		χ	χ			DE	315-328
4F00011			Sign Support Structures	χ	Х	Х		Х		χ	χ			DE	315-328
4F00012			Sign Support Structures	χ	χ	Х	_	χ		χ	χ		$\square$	DE	315-328
4F00018	Concrete Cloumn for Sign Structures		Sign Support Structures	χ	χ	Х	_	Х		χ	χ		Ш	DE	315-328
4F01GMP	Aluminum Posts for Ground Mounted Signs		Sign Support Structures	χ	χ	χ		χ	Ш	χ	χ		Ш	DE	315-328
4F05GMF	<u> </u>		Sign Support Structures	χ	-	Х		Χ	$\vdash$	χ	χ		$\square$	DE	315-328
4F10OHF			Sign Support Structures	χ	χ	χ		Χ	χ				Х	DE	315-325
4F11CSP		_	Sign Support Structures	χ	χ	Х		Х		χ	χ		Ш	DE	315-328
4F15IOS	Install Overhead Butterfly Sign Structure No. X		Sign Support Structures			_	χ	Х					Х	DE	315-325
4F20IOS	Install Overhead Cantilever Sign Structure No. X		Sign Support Structures			_	χ	Х	$\vdash$				Χ	DE	315-325
4F25IOS	Install Overhead Span Sign Structure No. X		Sign Support Structures	χ	χ	_		χ			χ			DE	315-325
4F26RES	Remove Existing Span Sign Structure No. X		Sign Support Structures	χ	χ		<u> </u>	X	$\vdash$		χ		$\square$	DE	315-325
4F30RES	Remove Existing Cantilever Sign Structure No. X	_	Sign Support Structures	χ	χ	_		χ			χ	-		DE	315-325
4G01TE1	TFE Expansion Bearing, x" X x", Type xx	Each	TFE Expansion Bearing, Type EG	χ		χ		Χ		χ	X	χ	Χ	DE	325-328

Exhibit 3 - 9

Material Acceptance Criteria Matrix

Item Spec Number	Pay Item Description	Pay Unit	Standard Specification Description	Source	Testing	Division 900 -	Other Conformance	Shop Drawings	Mix Design	QC Plan	Mill Certifications	Certifications of Compliance	Receiving Tickets	Reviewer (CM or DE)	Reference Page No. in the Std Spec or Sup Specs
4H00PEP	Plain Elastomeric Bearing Pad, x" x x"	Each	TFE Expansion Bearings	χ		χ		Х		χ	χ	χ	χ	DE	
4H02LEP	Laminated Elastomeric Bearing Pad, x" x x"	Each	TFE Expansion Bearings	χ		χ		χ		χ	χ	χ	χ	DE	325-328
4J01DAW	Damp-proofing	S.Y.	Miscellaneous			χ							χ	CM	SS
4J02DAW	Waterproofing	S.Y.	Miscellaneous			χ							χ	CM	SS
4J04DAW	Preformed Sheet Membrane Waterproofing	S.Y.	Miscellaneous			χ							χ	CM	SS
4L00004	8" Drainage Pipe, (Fiberglass)	L.F.	8" Drainage Pipe, (Fiberglass)			χ				χ				CM	SS
4L01BDR	Inlet Frames and Grates	Each	Inlet Frames and Grates			χ				χ				CM	SS
4L07SCU	Scuppers	Each	Scuppers			χ				Х				CM	SS
4M00001	Articulated Concrete Block Mattress	S.Y.	Underbridge Slope Protection	χ	χ	χ		χ			χ		χ	CM	385-388
4M02USP	Concrete Slope Protection	SF	Underbridge Slope Protection	χ	χ	χ		χ			χ		χ	CM	385-388
4M06USP	Stone Slope Protection	S.Y.	Underbridge Slope Protection	χ	χ	χ		χ			χ		χ	CM	385-388
4000COS	Cut-Off Sheeting	SF	Temporary Sheeting												
4001TSP	Temporary Sheeting	SF	Temporary Sheeting	χ		χ		χ						DE	392-393
4002TSP	Temporary Sheeting to Remain in Place	SF	Temporary Sheeting	χ		χ		χ						DE	392-393
4P15PCS	Protective Coating	S.F.	Permanent Sheeting		Х	χ	χ	χ			χ		χ	CM	SS
4Q00001	Catches	SY	Bridge Deck Rehabilitation			χ		χ		χ		χ		DE	396-438
4Q00BWR	Backwall Reconstruction	LF	Bridge Deck Rehabilitation			χ		χ				χ	χ	CM	SS
4Q01APJ	Asphaltic Plug Joint	SF	Bridge Deck Rehabilitation	χ		Х		χ				Χ	χ	CM	396-438
4Q07BDR	Removal of Asphalt Surfacing and Scarify Concrete	S.Y.	Bridge Deck Rehabilitation	χ		χ		χ				χ	χ	CM	396-438
4Q08BDR	Removal of Existing Surfacing	SY	Bridge Deck Rehabilitation					χ		χ				CM	396-438
4Q24BDR	Reinforcement Steel, Field Anti - Corrosion Coating	SF	Bridge Deck Rehabilitation	χ		χ		χ		χ		χ	χ	CM	396-438
4Q30S01	Spall Repair, Type 1	SF	Bridge Deck Rehabilitation					χ						CM	412
4Q60JSR	Joint Seal Replacement, Type 1	LF	Bridge Deck Rehabilitation	χ		Χ		Х				Χ	χ	CM	422
4R00013	Parapet Reconstruction Location No. 1	L.F.	Bridge Structural Repair	χ		χ				χ		χ	χ	CM/DE	SS
4R01SC1	Repair Spalled Concrete, Type 1 - Abutment	SF	Bridge Structural Repair										χ	CM	439-455
4R02SC1	Repair Spalled Concrete, Type 1 - Pier	SF	Bridge Structural Repair										χ	CM	439-455
4R25BSR	Substructure Membrane Waterproofing	SF	Bridge Structural Repair	χ		χ				χ		χ	χ	CM	439-455
4R26RBG	Reconstruct Bearing Area	Each	Bridge Structural Repair	χ		Χ				Х		Χ	Χ	CM	SS
4Z00APC	Anti-Graffiti Protective Coating	S.F.	Bridge Structural Repair	χ		χ				χ		χ	χ	CM	SS
4ZA00GMP	Ground Mounted Post, Type A	L.F.	Bridge Structural Repair	χ		χ				χ		χ	χ	DE	SS
4ZA00NBF	Noise Barrier Foundation	L.F.	Bridge Structural Repair	χ		Χ				Χ		χ	χ	DE	SS
4ZA00NBP	Ground Mounted Noise Barrier Panel	S.F.	Bridge Structural Repair	χ		Χ				Χ		χ	χ	DE	SS
4ZA00RNB	Remove Existing Ground Mounted Noise Barrier	L.S.	Bridge Structural Repair	χ	_	χ		_		χ	_	X	χ	DE	SS
4ZA10NBS	Concrete Penetrating Stain	S.F.	Bridge Structural Repair	χ		χ				χ		Χ	χ	CM	SS
4ZA42CRA	Additional Crushed Stone	C.Y.	Bridge Structural Repair	χ	<u> </u>	χ		<u> </u>		χ		χ	χ	CM	SS
4ZF0001	MSE Abutment Wall No. X	SF	MSE Walls	χ		Х	χ	_	_	χ	_	Χ	χ	DE	SS
4ZF0008	MSE Wing Wall No. X	S.F.	MSE Walls	χ		_	χ	_	_	_	_	-	-	DE	SS
4ZF0012	MSE North Abutment	S.F.	MSE Walls	χ		χ	Х	_	_		_	χ	χ	DE	SS
4ZF0019	Retaining Wall No. X	CY	MSE Walls	Χ	_	χ	Χ	_	_	_	χ	χ	χ	DE	SS
4ZG02PMW	Prefabricated Modular Wall No. X	S.F.	MSE Walls	X	_	Х	X	-	_	_	X	X	Х	DE	SS
4ZG07RET	Temporary Retaining System	S.F.	MSE Walls	χ	L	Χ	χ	χ	Х	χ	-	X	χ	DE	SS
4ZL0001	30" Diameter Drilled Shaft	LF	Drilled Shafts for Sign Structure Foundations	X	_	Х	-	X		_	X	_	X	DE	SS
4ZL0002	Demonstration Drilled Shaft, 96-Inch Diameter	Each	Drilled Shafts for Sign Structure Foundations	X	L	Х	-	X		L	X		χ	DE	SS
4ZL0004	Osterberg Cell Load Test, 96-Inch Diameter Shaft	Each	Drilled Shafts for Sign Structure Foundations	X		X	-	X			X		χ	DE	SS
4ZL0005	Obstructions  Crosspela Senia Logging (CSL) of Drilled Shaft	L.F.	Drilled Shafts for Sign Structure Foundations  Drilled Shafts for Sign Structure Foundations	X		X	-	X			X		χ	DE DE	SS
4ZL0006	Crosshole Sonic Logging (CSL) of Drilled Shaft	Each	Dullier outsite for ordin orthornia Londonious	χ		χ	1	χ			χ		χ	ΝE	SS

Exhibit 3 - 9

Material Acceptance Criteria Matrix

Item Spec Number	Pay Item Description	Pay Unit	Standard Specification Description	Source	Testing	Division 900 - Conformance	Other	Shop Drawings	Mix Design	QC Plan	Mill Certifications	Certifications of Compliance	Receiving Tickets	Reviewer (CM or DE)	Reference Page No. in the Std Spec or Sup Specs
4ZL0007	Crosshole Tomography, If and Where Directed	Each	Drilled Shafts for Sign Structure Foundations	χ		χ		χ			χ		Χ	DE	SS
4ZL0008	Concrete Coring at Drilled Shaft, If and Where Directed	L.F.	Drilled Shafts for Sign Structure Foundations	χ		χ		χ			χ		Х	DE	SS
4ZL0011	Shaft Inspection Device (Mini-SID)	Each	Drilled Shafts for Sign Structure Foundations	χ		χ		χ			χ		Χ	DE	SS
4ZL0013	Drilled Shaft for Sign Structures	L.F.	Drilled Shafts for Sign Structure Foundations	χ		χ		Χ			χ		Χ	DE	SS
4ZL0016	54" Drilled Shaft for Sign Structures	LF	Drilled Shafts for Sign Structure Foundations	χ		χ		χ			χ		Х	DE	SS
4ZL0017	30" Diameter Drilled Shafts for Sign Structure	L.F.	Drilled Shafts for Sign Structure Foundations	Χ		χ		Χ			χ		Х	DE	SS
4ZL0026	Sonic Caliper Test	Each	Drilled Shafts for Sign Structure Foundations	χ		χ		Χ			χ		Х	DE	SS
4ZL01SDE	Furnishing Drilled Shaft Drilling Equipment	L.S.	Drilled Shafts for Sign Structure Foundations	χ		Х		χ			Х		Х	DE	SS
4ZM02HPC		C.Y.	High Performance Concrete (HPC)	χ	χ	Х		χ	χ		Х		χ	CM/DE	SS
4ZM03HPC		CY	High Performance Concrete (HPC)	χ	χ	χ		χ	χ		Х		Х	CM	418
4ZM04HPC	Concrete in Parapet, HPC	CY	High Performance Concrete (HPC)	χ	χ	χ		χ	χ		Х		χ	CM/DE	418
4ZM05HPC	Bridge Approach Slab, HPC	S.Y.	High Performance Concrete (HPC)	Х	χ	Х		χ	χ		Х		Х	CM	SS
4ZM08HPC		S.Y.	High Performance Concrete (HPC)	χ	χ	χ		χ	χ		χ		Х	CM	SS
4ZM09HPC		C.Y.	High Performance Concrete (HPC)	Х	Х	Х		Х	Х		Х		Х	CM	SS
4ZM10HPC		C.Y.	High Performance Concrete (HPC)	χ	χ	Х		χ	χ		Х		χ	CM	SS
4ZM12HPC		C.Y.	High Performance Concrete (HPC)	χ	χ	χ		χ	Х		Х		Х	CM	SS
4ZN0031	Bitumen Coating	LF	Bitumen Coating For Steel Piles	Х			Х	Х					Х	CM	644
4ZN0032		L.S.	Salt Storage Structure	X			X	-						CM	SS
	Install Overhead Span Variable Message Sign and Variable Speed Limit Sign Support														
4ZN0037		LS	Overhead Span VMS & VSLS Supports	χ		χ		χ			χ		x	CM/DE	SS
12110001	Citation No. 7		Overhead opan vino a vece supporte	^		<u> </u>		^			Ť.		^	OW/DL	- 00
4ZN0041	Fabrication and Delivery of overhead Span Sign Support Structure, xx'-x" Length	Each	Overhead Span VMS & VSLS Supports	X		χ		χ			X		X	DE/CM	SS
4ZN0081		S.Y.	Overhead Span VMS & VSLS Supports	Х		Х		Х			Х		Х	DE	SS
4ZN0082	00 0	S.Y.	Overhead Span VMS & VSLS Supports	Х		Х		Х			X		Х	DE	SS
4ZN0085	Removal of Existing VMS Signs and Structures	L.S.	Overhead Span VMS & VSLS Supports	X		Х		Х			Х		Χ	CM/DE	SS
4ZN00SSP	Steel Soldier Piles	L.F.	Overhead Span VMS & VSLS Supports	X		X		X			Ιχ.		X	DE	SS
	8-Inch Combination Underdrain	I F	Underdrains	Х	χ	Х	<del>                                     </del>						Х	CM	481-482
5A00004	8" Outlet Pipe	LF.	Underdrains	χ	χ	X		1	-		┢		χ	CM	481-482
5A00007	10" Pipe Underdrain	L.F.	Underdrains	χ	χ	X							χ	CM	481-482
5A00007	12" High Density Polyethylene Pipe	L.F.	Underdrains	χ	χ	χ	1	1	-		<del>                                     </del>		χ	CM	481-482
5A00000	12" High Density Polyethylene Elbows	Each	Underdrains	χ	χ	χ	_	-			-		Х	CM	481-482
5A00003	, , , ,	Each	Underdrains	χ	χ	Х		-			$\vdash$		χ	CM	481-482
5A00010	12" Trench Drain	L.F.	Underdrains	χ	χ	χ		$\vdash$			$\vdash$		χ	CM	481-482
5A00011		S.Y.	Underdrains	χ	χ	X							Х	CM	481-482
5A00012 5A00013	18 Inch Half Section Corrugated Metal Pipe	1 F	Underdrains	Х	Х	Х	$\vdash$	$\vdash$	$\vdash$	$\vdash$	$\vdash$		Х	CM	481-482
5A00013	Underdrain, Type X	L.F.	Underdrains	Х	Х	Х	1	$\vdash$	$\vdash$	$\vdash$	$\vdash$		Х	CM	481-482
5A12PBD	Louis I a l		Storm Drains	_	¥		_		_			.,		CM	483-487
5B00001		LF Each	Storm Drains	X	$\vdash$	Х	-	-		-	$\vdash$		X	CM	483-487
5B00001		_		X	$\vdash$	-	+	$\vdash$	$\vdash$	$\vdash$	$\vdash$	X	X	CM	483-487
			Storm Drains	χ	-	X	+	$\vdash$	-	$\vdash$	-	X	X		483-487
5B00004 5B00008	42" Reinforced Concrete Culvert Pipe	L.F.	Storm Drains	χ		X	1	Ͱ	$\vdash$	$\vdash$	$\vdash$	X	X	CM	-
	8" Corregated Metal Pipe	L.F.	Storm Drains	X		X	+	$\vdash$	$\vdash$	$\vdash$	$\vdash$	X	X		483-487
5B00014 5B00018	19" x 30" Horizontal Elliptical Reinforced Concrete Pipe 38"X60" Reinforced Concrete Elliptical Pipe	L.F.	Storm Drains	X		X	1	$\vdash$	-		$\vdash$	X	X	CM	SS SS
		L.F.	Storm Drains	X	-	X	_	$\vdash$	$\vdash$	$\vdash$	$\vdash$	X	X	CM	
5B00024	48" Corrugated Aluminum Alloy Pipe, Gauge 12 29'X45" Reinforced Concrete Elliptical Flared End Sections	L.F.	Storm Drains	X		X	1	1	$\vdash$	$\vdash$	-	X	X	CM	481-487
5B00026	TOP THE CO. TO SHOW IN THE PROPERTY OF THE SHOW IN THE PROPERTY OF THE PROPERT	Each	Storm Drains	X	$\vdash$	X	+	$\vdash$	$\vdash$	$\vdash$	-	X	X		481-487
5B00030	36" Corrugated Aluminum Alloy Pipe, Gauge 14	L.F.	Storm Drains	Х		Χ	1	1				Χ	Х	CM	481-487

Exhibit 3 - 9

Material Acceptance Criteria Matrix

Item Spec Number	Pay Item Description	Pay Unit	Standard Specification Description	Source	Testing	Division 900 -	Other Conformance	Shop Drawings	Mix Design	QC Plan	Mill Certifications	Certifications of Compliance	Receiving Tickets	Reviewer (CM or DE)	Reference Page No. in the Std Spec or Sup Specs
5B00038	Precast Concrete Arch Culvert, 21' Diameter	L.F.	Storm Drains	χ		Х						χ	χ	CM	SS
5B00039	Precast Concrete Culvert, 8' x 11'	L.F.	Storm Drains	χ		χ						χ	χ	CM	SS
5B00042	29"x45" Reinforced Concrete Elliptical Pipe	L.F.	Storm Drains	χ		Х						χ	χ	CM	SS
5B00044	19" x 30" Reinforced Concrete Elliptical Pipe, Class V	L.F.	Storm Drains	χ		Х						χ	χ	CM	SS
5B00046	3" Ductile Iron Pipe	L.F.	Storm Drains	χ		Х						χ	χ	CM	SS
5B00048	43" x 68" Reinforced Concrete Elliptical Pipe, Class V	L.F.	Storm Drains	χ		Х						χ	χ	CM	SS
5B00HSC	18 Inch Half Section Corrugated Metal Pipe	L.F.	Storm Drains	χ		Χ						χ	χ	CM	SS
5B00VDS	Vertical Drain System	S.Y.	Storm Drains	χ		χ						χ	χ	CM	SS
5B01CSD	Cleaning Existing Storm Drains	L.F.	Storm Drains				χ			χ				CM	SS
5B08PVC	8" PVC Schedule 80	L.F.	Storm Drains	χ		Х						χ	χ	CM	SS
5B12CME	12" Corrugated Metal Flared End Section	Each	Storm Drains	χ		χ						χ	χ	CM	SS
5B12DIP	12" Ductile Iron Pipe	L.F.	Storm Drains	χ		χ						χ	χ	CM	SS
5B12FCE	12" Reinforced Concrete Flared End Section	Each	Storm Drains	χ		χ						χ	χ	CM	SS
5B12PFS	12" High Density Polyethylene Flared End Section	Each	Storm Drains	χ		χ						χ	χ	CM	SS
5B12RC3	12" Reinforced Concrete Pipe	L.F.	Storm Drains	χ		χ						χ	χ	CM	SS
5B12RC5	12" Reinforced Concrete Pipe, Class V	L.F.	Storm Drains	χ		Х						χ	χ	CM	SS
5C55CDS	Cleaning Existing Drainage Structures	Each	Storm Drains				χ			Χ				CM	SS
5C56CDS	Clean Existing Drainage System	LF	Storm Drains				Х			Х				CM	483-487
5C00001	Inlet, Type D1 Modified	Each	Manholes & Inlets	χ		Х		Х			Х		χ	CM	487-491
5C00004	Outlet Control Structure	Each	Manholes & Inlets			χ		χ				χ	χ	CM	487-491
5C00006	Temporary Pipe Plug	Each	Manholes & Inlets	χ		Х		χ					χ	CM	SS
5C00007	Inlet, Type Double D1	Each	Manholes & Inlets	χ		Х		Х			χ		Х	CM	SS
5C00010	Inlet, Type D1 (NJDOT)	Unit	Manholes & Inlets	s		S		S			S		S	CM	SS
5C00017	Manhole, Type MHX	Each	Manholes & Inlets	χ		Х		Х			χ		χ	CM	487-491
5C00018	Inlet, Type D2-1	Each	Manholes & Inlets	Х		Х		Х			χ		χ	CM	487-491
5C00022	Reset Existing Casting	Each	Manholes & Inlets	Х			Х	_						CM	SS
5C00023	Flow Control Structure	Each	Manholes & Inlets	Х		Х		Х		Х	Х		Х	DE	SS
5C00027	Projecte Chamber	Foob	Manholes & Inlets	.,		,,					.,		.,	DE	487-491
5C00027 5C00028	Drainage Chamber  Manhole, Type SP-1	Each	Manholes & Inlets	χ		X		X			X		Х	CM	487-491
5C00029	Manhole, Type SP-2	Each	Manholes & Inlets	χ		X		X			X		X	CM	487-491
5C00029 5C00039	Reset Frame, Type E with Extension	Each Each	Manholes & Inlets	χ		X	v	X			X		X	CM	487-491
5C00039	Outlet Structure		Manholes & Inlets	χ		X	Х	X			X		X	CM	\$S
5C05NBO	New Inlet Frame & Grate, Type B	Each Each	Manholes & Inlets	χ		X	-	X			X		X	CM	SS
5C05NG1	New Inlet Frame & Grate, Type B	Each	Manholes & Inlets	X		_		_		v	_			CM	SS
5C10ED2	Reconstructed Inlet, Type D2, Using Existing Grate and Frame	Each	Manholes & Inlets	X		X	$\vdash$	X		Х	X	$\vdash$	X	CM	SS
5C10ED2	Incidental Concrete	Each	Manholes & Inlets			_	-	Х						CM	SS
5C10INC 5C10INT	Inlet Converted to Manhole		Manholes & Inlets	X		X	$\vdash$	Х			X		X	CM	SS
5C10NBX	Reconstructed Inlet, Type B1-X1, Using New Grate and Frame	Each	Manholes & Inlets	Х		X		Х			Х		X	CM	SS
OC IONDA	Incomparation in liet, Type DT-AT, Osting them Grate and Frame	LdUII	INIGHTHOUS & ITHELD	Ý		X	1	I X			Y		λ	UN	00
5C25NFC	New Manhole Frame and Cover	Each	Manholes & Inlets	v		l v		X		v	l v		,	CM	SS
5C40RPI	Repair Inlets	SF	Manholes & Inlets	χ		X	Х	-		Х	X		X	CM	487-491
5C40RSF	Reset Frame	Each	Manholes & Inlets	X		Х	Х	_		Х	-			CM	487-491
5C50TCI	Temporary Inlet Cap	Each	Manholes & Inlets	Х		X	X	X	$\vdash$	X	X		X	CM	\$S
5C56CDS	Clean Existing Drainage System	LF	Manholes & Inlets	^		^	Х	+^		Х	^	$\vdash$	^	CM	SS
5D00001	Fill Abandoned Pipe	CY	Minor Conc Structures & Incidental Conc	χ	χ	Х	^	$\vdash$	χ	^	H	H	χ	CM	492
5D00001	precast Concrete Splash Pad	Each	precast Concrete Splash Pad	χ	Х	Х		$\vdash$	Х				Х	CM	SS
200000	The second second of the second secon	Lavil	Ip. 2022. Odnoroto opiadni i ad	Λ	٨	Ι ^	1	_	L ^				_^	Ų IVI	

Exhibit 3 - 9

Material Acceptance Criteria Matrix

Item Spec Number	Pay Item Description	Pay Unit	Standard Specification Description	Source	Testing	Division 900 -	Other	Shop Drawings	Mix Design	QC Plan	Mill Certifications	Certifications of Compliance	Receiving Tickets	Reviewer (CM or DE)	Reference Page No. in the Std Spec or Sup Specs
5D00003	Pipe Support Bridge	L.S.	Pipe Support Bridge	Х	Х	χ			Х	Ť	Ī		Х	DE	492
5D00004	Mitered Headwall	Each	Mitered Headwall	χ	χ	χ			χ				χ	CM	SS
5D01G04	Concrete Gutter, 4" Thick	S.Y.	Concrete Gutter, 4" Thick	χ	Х	Х			χ				χ	CM	SS
5E01ALC	Asphalt Concrete Lip Curb	L.F.	Asphalt Conc. Lip Curb and Lip Curb inlets	Χ	χ	χ			χ				χ	CM	493
5E02ALC	Asphalt Concrete lip Curb Inlet	Each	Asphalt Conc. Lip Curb and Lip Curb inlets	Χ	χ	χ			χ				Χ	CM	493
5F00001	9" x 16" Concrete Verticle Curb (NJDOT)	LF	Concrete Curb	Χ	χ	χ			χ				χ	CM	495
5F00002	Concrete Island, 4" Thick	SY	Concrete Curb	χ	χ	Х			χ				χ	CM	495
5F00003	Belgian Block Curb	LF	Concrete Curb	χ	χ	χ			χ				χ	CM	SS
5F01CLC	Concrete Lip Curb	L.F.	Concrete Curb	χ	Х	χ			χ				χ	CM	495
5H00001	Concrete Median Barrier, Protection, Variable Height	LF	Concrete Median Barrier		χ	χ		χ	χ		χ		χ	CM	497
5H00004	VMS Equipment Median	Each	Concrete Median Barrier		χ	χ		χ	χ		χ		χ	DE	497
5H01CMB	Concrete Median Barrier Roadway	LF	Concrete Median Barrier		χ	χ		χ	χ		χ		χ	CM	497
5H02CBC	15"x41" Concrete Barrier Curb	L.F.	Concrete Median Barrier		Χ	χ		χ	χ		χ		χ	CM	497
5H03CMB	Concrete Median Barrier, Protection	LF	Concrete Median Barrier		χ	Х		χ	χ		χ		χ	CM	497
5H06CMB	Concrete Median Barrier, Type 1	LF	Concrete Median Barrier		χ	Х		χ	χ		χ		Χ	CM	497
5H30CMB	Concrete Roadway Barrier With Moment Slab	LF	Concrete Median Barrier		Χ	χ		χ	χ		χ		χ	DE/CM	497
5100002	4" Aluminum Tube, Concrete Mounted	LF	Sign Support Structures	χ		χ		χ			χ		χ	CM	315
5101RES	Relocate Existing Ground-Mounted Sign	Each	Sign Panels			χ		χ				χ	χ	CM	SS
5101RGM	Removal of Existing Ground-Mounted Sign	Each	Sign Panels			χ		χ				χ	χ	CM	SS
5101SNP	Sign Panels	SF	Sign Panels			χ		χ				χ	χ	DE	501
5105SPP	U-Channel Post	LF	Sign Panels			χ		χ				χ	χ	CM	505
5I11REM	Remove Signs	Each	Sign Panels			χ		χ				χ	χ	CM	505
5I16REL	Relocate Sign Panels	Each	Sign Panels			Х		χ				χ	χ	CM	505
5J00007	Telescoping Guide Rail End Terminal	Each	Guard Rail	χ		Х		χ				χ	Χ	CM	506-512
5J00FGT	Flared Guide Rail Terminal	Each	Guard Rail	χ		Х		χ				χ	χ	CM	506-512
5J01OBT	Offset Bracket	Each	Guard Rail	χ		Х		χ				χ	χ	CM	SS
5J01PCA	Parapet Connection, Type A	Each	Guard Rail	χ		Х		χ				χ	χ	CM	506-512
5J01PCB	Parapet Connection, Type B	Each	Guard Rail	χ		χ		χ				χ	χ	CM	506-512
5J01RBG	Removal of Beam Guide Rail	LF	Guard Rail	Χ		Х		χ				χ	Χ	CM	506-512
5J01RPW	Beam Guide Rail Post Weldment	Each	Guard Rail	χ		Х		χ				χ	χ	CM	506-512
5J01SWA	Safety Walk Connection, Type A	Each	Guard Rail	χ		χ		χ				Χ	χ	CM	506-512
5J01SWB	Safety Walk Connection, Type B	Each	Guard Rail	Χ		Х		χ				Х	χ	CM	506-512
5J51BGE	Beam Guide Rail Element	L.F.	Guard Rail	Χ		Х		χ				χ	χ	CM	506-513
5J51TTS	Tangent Guide Rail Terminal	Each	Guard Rail	χ		χ		χ		$\vdash$	_	Χ	Х	CM	506-512
5J52ABG	Beam Guide Rail Anchorage	Each	Guard Rail	χ		χ		χ				Χ	Х	CM	506-512
5J52BET	Beam Guide Rail Buried End Terminal	Each	Guard Rail	χ		χ		χ		_	_	Χ	χ	CM	506-512
5J52BGD	Beam Guide Rail, Dual-Faced	LF	Guard Rail	χ		χ	_	χ					Х	CM	506-512
5J52BGR	Beam Guide Rail	LF	Guard Rail	χ		χ		χ		$\vdash$	L	Χ	χ	CM	506-512
5J52DFB	Beam Guide Rail, Dual-Faced, Bridge	LF	Guard Rail	X	_	χ		χ		$\vdash$	_	X	X	CM	506-512
5J53RRS	Rub Rail	LF	Guard Rail	χ		χ		χ		$\vdash$		Х	χ	CM	506-512
5J54BGP	Beam Guide Rail Post		Guard Rail	χ		Х		χ		L	L	X	χ	CM	506-512
5J56RGN	Reset Beam Guide Rail with New Post	L.F.	Guard Rail	χ		X	-	χ			_	X	χ	CM	SS
5JGRP02 5JRGR01	Beam Guide Rail Post, 8' Long Reset Beam Guide Rail, Type A	L.F.	Guard Rail Guard Rail	χ		X	$\vdash$	X				X	χ	CM CM	SS SS
	1 77			X		X		χ		$\vdash$		X	χ		
5K00001 5K00002	Chain Link Fence, Type II, 84" High	LF	Fencing	X		X		Х				X	χ	CM	512-516
JN0000Z	Vehicular Gate, Type II, 84" High, 12' Wide	⊑acii	Fencing	χ		χ		χ				χ	χ	CIVI	512-517

Exhibit 3 - 9

Material Acceptance Criteria Matrix

Item Spec Number	Pay Item Description	Pay Unit	Standard Specification Description	Source	Testing	Division 900 -	Other	Shop Drawings	Mix Design	QC Plan	Mill Certifications	Certifications of Compliance	Receiving Tickets	Reviewer (CM or DE)	Reference Page No. in the Std Spec or Sup Specs
5K00005	Chain Link Fence Gate	Each	Fencing	χ		Х		Х				Х	Х	CM	512-516
5K00009	Bridge Fencing, Curved Top, 75" High	L.F.	Fencing	χ		χ		Χ				χ	χ	CM	SS
5K00012	Chain-Link Fence, Aluminum Coated Steel, Bridge, 6'-3" High (NJDOT)	L.F.	Fencing	χ		χ		Χ				χ	χ	CM	SS
5K00017	Reset Fence	L.F.	Fencing	χ		χ		Х				χ	χ	CM	SS
	Chain Link Fence, Type II, 48" High	L.F.	Fencing	χ		χ		Х				χ	Χ	CM	SS
5K00020	Vehicular Gate, Type II, 48" High, 12' Wide	Each	Fencing	Χ		χ		Χ				χ	Χ	CM	SS
5K00021	Temporary Fencing, 96" High	L.F.	Fencing	Χ		χ		Χ				χ	χ	CM	SS
	Fence Screening Slats	L.F.	Fencing	Χ		χ		Χ				Χ	χ	CM	SS
5K00024	Vehicular Gate, Type II, 84" High, 30' Wide	Each	Fencing	Χ		Х		Х				Х	Χ	CM	SS
	Pedestrian Gate, Type II, 84" High, 4' Wide	Each	Fencing	χ		χ		Χ				Х	Χ	CM	SS
	Chain Link Fence, 7' High	L.F.	Fencing	Χ		χ		Χ				χ	Χ	CM	512-516
	Median Fencing	L.F.	Fencing	χ		χ	-	χ				χ	χ	CM	SS
5K84TCL	Temporary Chain Link Fence, Type II, 84" High	L.F.	Fencing	Χ		χ	_	Χ				χ	Χ	CM	SS
5L01MON	Concrete Monuments	Each	Concrete Monuments	Χ		χ	-					χ	Χ	CM	517
5N00002	Concrete Driveway Apron, 6" Thick	S.Y.	Sidewalk	Χ	χ	χ		χ					Χ	CM	
	Detectable Warning Surface	S.Y.	Sidewalk	Χ		χ		Χ					Χ	CM	SS
	Asphalt Concrete Sidewalk, 4" Thick	SY	Sidewalk	Χ		χ		Χ					Χ	CM	519-521
5N04PCS	Concrete Sidewalk, 4" Thick	S.Y.	Sidewalk	Χ	χ	χ	_	Χ					Χ	CM	519-521
111111111111	Reconstruct Safetywalk	S.F.	Sidewalk	Χ		χ		Х					Х	CM	SS
	Delineator, Type BA-R	Each	Delineators			χ	_					χ	Χ	CM	521-524
	Delineator, Type CAS-Y	Each	Delineators			χ						χ	Χ	CM	521-524
	Pavement Striping, White, 12" Wide	L.F.	Pavement Strips & Markings	Χ		χ	_	χ				Χ	χ	CM	525-535
5P01CMT	Preformed Contrast Marking Tape	L.F.	Pavement Strips & Markings	Х		Х	_	Х		_		Х	Х	CM	525-535
	Diamond Grinding	L.F.	Pavement Strips & Markings	Х		Х	+	Х				χ	Х	CM	525-535
	Striping and Marking Removal	L.S.	Pavement Strips & Markings	χ		χ	χ	χ				χ	χ	CM	525-535
5P07REM	Removal of Pavement Stripes (Hydromilling)	L.F.	Pavement Strips & Markings	Χ		χ						Х	Х	CM	525-535
	Horizontal Ramp Gate	Each	Pavement Strips & Markings	Χ		Х	-	Х				χ	Χ	CM	525-535
5P10TMP	Temporary Pavement Striping	LF	Pavement Strips & Markings	Χ		Χ	_	Χ				Χ	Χ	CM	525-535
5P20LLS	Traffic Stripes, Long - Life, Epoxy Resin	L.F.	Pavement Strips & Markings	Χ		χ	_	Х				χ	Χ	CM	525-535
5P30LLM	Traffic Markings, Lines, long - Life, Epoxy Resin	L.F.	Pavement Strips & Markings	Χ		χ	_	Χ				χ	Χ	CM	525-535
5P31LLM	Traffic Markings, Lines, Long - Life, Thermoplastic	L.F.	Pavement Strips & Markings	χ		χ	_					χ	Χ	CM	525-535
	Furnish Field Office, Type A	Unit	Maintain Field Office			_	Х	_						CM	SS
	Maintain Field Office, Type A	Month					Х							CM	SS
	Remove Field Office Complex	L.S.	Maintain Field Office				Х					<u> </u>	Щ	CM CM	SS SS
5Q20MFC	Maintain Field Office Complex		Maintain Field Office			<u> </u>	Х								
5R01RPG	Horizontal Ramp Gate		Horizontal Ramp Gate			<u> </u>	_		_			<u> </u>	Х	CM	SS
	Test Pits		Test Pits	_		1	+	$\vdash$		_			Х	CM	549-550
5V02PIT	Test Pit Extra Depth	L.F.	Test Pits		_	+	_	$\vdash$			_		Х	CM	549-550
	Cleaning Existing Storm Drain, 12" to 48" Diameter	LF	Miscellaneous Drainage			1	X	$\vdash$					X	CM	550-552 550-552
	Clean Existing Storm Drains, 15" to 24" Diameter	L.F.	Miscellaneous Drainage			<u> </u>	χ	-		_		_	χ	CM	0.00 11 70,000
	Quadguard Impact Attenuator, 9 Bays, 36" Wide	1000	Impact Attenuator	_		1	_	Х		_			Χ	CM	552-553
	Pressure Grout Approach Slab Z-Turn Attrnuator		Impact Attenuator Impact Attenuator			$\vdash$		X				-	X	CM CM	552-553 552-553
			Mile Marker	12			Х	-					Х	CM	554
	Mile Marker, Type RP			χ		χ	-	Х	<u> </u>			_	χ		
	Utility Support Hangers	_	Utility Support Hangers	χ		χ	_	χ					Χ	CM/DE	555-556
5ZD01RPM	Raised Pavement Markers	Each	Raised Pavement Markers	χ		χ		Χ					χ	CM	558

Exhibit 3 - 9

Material Acceptance Criteria Matrix

Item Spec Number	Pay Item Description	Pay Unit	Standard Specification Description	Source	Testing	Division 900 - Conformance	Other	Shop Drawings	Mix Design	Mill Certifications	Certifications of	Compliance Receiving Tickets	Reviewer (CM or DE)	Reference Page No. in the Std Spec or Sup Specs
5ZD07RPM	Raised Pavement Markers, Bi-Directional, Amber Lens	Each	Raised Pavement Markers	χ		χ		χ				Х	CM	558
5ZG00PJ	48 Inch Reinforced Concrete Pipe, Class V Pipe Jacking	LF	Pipe Jacking	χ		χ		χ					CM/DE	SS
5ZG04PJ	30 Inch Steel Pipe Jacking	L.F.	Pipe Jacking	χ		χ		χ					CM/DE	SS
5ZH01RST	Thermoplastic Rumble Strips	L.F.	Rumble Strips	χ		χ		χ					CM	S
5ZJ0004	Stormwater Diversion Chamber	Each	Stormwater Diversion Chamber	χ		χ		χ					CM/DE	SS
5ZJ01STU	Stormwater Treatment Units	Each	Manholes and Inlets	χ		χ	χ	χ			χ		CM/DE	SS
5ZL00FAC	Temporary Water Facilities	L.S.	Temporary Water Facilities	χ		χ		χ		)		Х	CM/DE	SS
5ZL0002	2-6" Electric Riser Conduit, Concrete Encased	L.F.	PS&G Electric Manholes and Conduits	χ		χ		χ		)		Х	CM	SS
5ZL0003	Electric Manhole	Each	PS&G Electric Manholes and Conduits	χ		χ		χ		)		Х	CM	SS
5ZL0004	6-4" Telephone Conduit Bank	L.F.	PS&G Electric Manholes and Conduits	χ		χ		χ		)		Х	CM	SS
	6-4" Telephone Conduit Bank, Bridge Mounted	L.F.	PS&G Electric Manholes and Conduits	χ		χ		χ		)		Х	CM	SS
5ZL0012	9-5" Duct, Concrete Encased Ductbank	LF	PS&G Electric Manholes and Conduits	χ		χ		χ		)		Х	CM	SS
5ZL0017	36" Split Steel Casing	L.F.	PS&G Electric Manholes and Conduits	χ		χ		χ		)		Х	CM	SS
5ZL0020	Water Service Connection	Each	PS&G Electric Manholes and Conduits	χ		χ		χ		)		Х	CM	SS
5ZL0021	6" Ductile Iron Pipe Sewer Main	L.F.	PS&G Electric Manholes and Conduits	χ		χ		χ		)		Х	CM	SS
5ZL0022	Manufactured Treatment Devices, Type 1	Each	PS&G Electric Manholes and Conduits	χ		χ	χ	χ			Х		CM	SS
5ZL0028	2-5" Duct, Sand Encased Ductbank	LF	PS&G Electric Manholes and Conduits	χ		χ		χ		)		Х	CM	SS
5ZL0029	Reset Water Valve Boxes	Each	PS&G Electric Manholes and Conduits	χ		χ		χ		)		Х	CM	SS
5ZL0030	48" Steel Casing Pipe, Jacking And Tunneling Method	L.F.	PS&G Electric Manholes and Conduits	χ		χ		χ		)	[	Х	CM	SS
5ZL0031	26" Steel Casing Pipe	L.F.	PS&G Electric Manholes and Conduits	χ		χ		χ		)		X	CM	SS
5ZL0032	6" Polyvinyl Chloride Sewer Pipe	L.F.	PS&G Electric Manholes and Conduits	χ		χ		χ		)		Х	CM	SS
5ZL0033	8" Ductile Iron Sanitary Sewer Force Main	L.F.	PS&G Electric Manholes and Conduits	χ		χ		χ		)		Х	CM	SS
5ZL0035	12" Plastic Gas Main	L.F.	PS&G Electric Manholes and Conduits	Х		Х		Х		)		Х	CM	SS
5ZL0037	12" Steel Gas Main	L.F.	PS&G Electric Manholes and Conduits	χ		χ		χ		)		Х	CM	SS
5ZL0038	Electrical Conduit, 3" Steel	L.F.	PS&G Electric Manholes and Conduits	χ		χ		χ		)		Х	CM	SS
5ZL0039	Concrete Encased 4" Duct Bank	L.F.	PS&G Electric Manholes and Conduits	Χ		χ		χ	$\perp$	)		X	CM	SS
5ZL0041	12"X12"X6" C.I. Junction Box	Each	PS&G Electric Manholes and Conduits	χ		χ		χ		)		X	CM	SS
5ZL0044	8" Polyvinyl Chloride Sewer Pipe	L.F.	PS&G Electric Manholes and Conduits	χ		χ		χ		)		Х	CM	SS
5ZL0081	Water Main Blow Off Assemblies	Each	PS&G Electric Manholes and Conduits	χ		χ		χ		)	_	Х	CM	SS
5ZL0085	12" Tapping Sleeve and Valve	Each	PS&G Electric Manholes and Conduits	χ		χ		χ	4	)		X	CM	SS
5ZL0086	12" Line Valve	Each	PS&G Electric Manholes and Conduits	χ		χ		Х	_	)	_	X	CM	SS
5ZL0087	12" Line Stop	Each	PS&G Electric Manholes and Conduits	Х		χ		Χ	4	)	_	X	CM	SS
5ZL0088	Manhole, Sanitary Sewer, 5' Diameter	Each	PS&G Electric Manholes and Conduits	χ		χ		Х	4	)	-	X	CM	SS
5ZL0090	Sanitary Sewer Air Release And Vacuum Valve Assemblies	Each	PS&G Electric Manholes and Conduits	χ		χ		χ		)	_	X	CM	SS
5ZL0091	Sanitary Sewer Sampling Valve Assemblies	Each	PS&G Electric Manholes and Conduits	χ		Χ		χ	_	)	_	X	CM	SS
5ZL0092	Sanitary Sewer Blow Off Valve Assemblies	Each	PS&G Electric Manholes and Conduits	Χ		χ		χ		)		X	CM	SS
5ZL0093	Cable Hand Hole		PS&G Electric Manholes and Conduits	χ		χ	Ш	χ	$\perp$	)	_	X	CM	SS
5ZL0094	Utility Relocation, Telephone		PS&G Electric Manholes and Conduits	χ		χ	Ш	χ	$\perp$	)	_	X	CM/DE	SS
5ZL0100	6" Line Stop		PS&G Electric Manholes and Conduits	χ		χ	Ш	χ	$\perp$	)	_	X	CM	SS
5ZL0105	2-4" Telephone Riser Conduit		PS&G Electric Manholes and Conduits	Х		χ	Ш	Х		)	_	X	CM	SS
5ZL0106	2-4" Telephone Riser Conduit, Concrete Encased	L.F.	PS&G Electric Manholes and Conduits	χ		χ	Ш	Х	$\perp$	)	_	Х	CM	SS
5ZL0107	1-4" Cable Riser Conduit, Concrete Encased	L.F.	PS&G Electric Manholes and Conduits	χ		χ	Ш	χ	$\perp$	)	_	χ	CM	SS
5ZL0108	Manhole, PSE&G 3-WAY		PS&G Electric Manholes and Conduits	Х		χ	Ш	Х	$\perp$	)	_	Х	CM	SS
	8" PVC Sanitary Pipe		PS&G Electric Manholes and Conduits	χ		χ	Н	Χ	_	)	_	X	CM	SS
5ZL0114	Reset Gas Valve		PS&G Electric Manholes and Conduits	Х		χ	$\vdash$	Х	+	)	_	X	CM	SS
5ZL0119	Relocation of JCP&L Electrical Facilities	L.S.	PS&G Electric Manholes and Conduits	Χ		χ		Х		)		X	CM/DE	SS

Exhibit 3 - 9

Material Acceptance Criteria Matrix

Item Spec Number	Pay Item Description	Pay Unit	Standard Specification Description	Source	Division 900 - Conformance Other	Shop Drawings	Mix Design	QC Plan	Mill Certifications	Certifications of Compliance	Receiving Tickets	Reviewer (CM or DE)	Reference Page No. in the Std Spec or Sup Specs
	6-4" Telephone PVC Conduits	L.F.	PS&G Electric Manholes and Conduits	χ	Х	χ			Х		χ	CM	SS
5ZL0124	2-4" Electrical (PSE&G) PVC Conduits	L.F.	PS&G Electric Manholes and Conduits	χ	Х	χ			χ		χ	CM	SS
5ZL0125	4-4" Cable TV PVC Conduits (Encased in Concrete)	L.F.	PS&G Electric Manholes and Conduits	χ	χ	χ			χ		χ	CM	SS
5ZL0126	4-4" Cable Conduit Bank, Bridge Mounted	L.F.	PS&G Electric Manholes and Conduits	χ	Х	χ			χ		χ	CM/DE	SS
5ZL0127	9-5" Duct, On Structures	L.F.	PS&G Electric Manholes and Conduits	χ	Х	χ			χ		χ	CM/DE	SS
5ZL0128	2-5" Duct, Concrete Encased Ductbank, with Risers	L.F.	PS&G Electric Manholes and Conduits	χ	Х	χ			χ		χ	CM	SS
5ZL0130	4" Ductile Iron Pipe Sewer Main	L.F.	PS&G Electric Manholes and Conduits	χ	Х	χ			χ		χ	CM	SS
5ZL0132	6" Sanitary Sewer Valve	Each	PS&G Electric Manholes and Conduits	χ	Х	χ			χ		χ	CM	SS
5ZL0133	16" Steel Casing	L.F.	PS&G Electric Manholes and Conduits	χ	Х	χ			Х		χ	CM	SS
5ZL0134	Removal of Sewer Pipe	L.F.	PS&G Electric Manholes and Conduits	χ	Х	χ			χ		χ	CM	SS
	Sanitary Wastewater Transport and Disposal	L.S.	PS&G Electric Manholes and Conduits	χ	Х	χ			Х		χ	CM	SS
	6" Ductile Iron Water Pipe	L.F.	PS&G Electric Manholes and Conduits	χ	Х	χ			χ		χ	CM	SS
5ZL0144	10" Water Valve	Each	PS&G Electric Manholes and Conduits	χ	χ	χ			Х		χ	CM	SS
5ZL0145	10" Ductile Iron Water Cap	Each	PS&G Electric Manholes and Conduits	χ	Х	χ			χ		χ	CM	SS
5ZL0148	Water Service Cap	Each	PS&G Electric Manholes and Conduits	χ	Х	χ			Х		χ	CM	SS
5ZL0149	Water Hydrant	Each	PS&G Electric Manholes and Conduits	χ	Х	χ			Χ		χ	CM	SS
5ZL0151	Removal of Water Pipe	L.F.	PS&G Electric Manholes and Conduits	χ	Х	χ			χ		χ	CM	SS
5ZL0152	12" Gas Valve	Each	PS&G Electric Manholes and Conduits	χ	Х	χ			χ		χ	CM	SS
5ZL0153	Reset Gas Valve Box	Each	PS&G Electric Manholes and Conduits	χ	Х	χ			χ		χ	CM	SS
5ZL0154	Gas Service Cap	Each	PS&G Electric Manholes and Conduits	χ	Х	χ			Х		χ	CM	SS
5ZL0155	Linestop and Tie-In Assistance	Crew	PS&G Electric Manholes and Conduits	χ	χ	χ			χ		χ	CM	SS
5ZL0156	Fabricate Gas Tie-In Piece	Each	PS&G Electric Manholes and Conduits	χ	Х	χ			χ		χ	CM	SS
5ZL0157	Removal of Gas Pipe	L.F.	PS&G Electric Manholes and Conduits	χ	Х	χ			Х		Х	CM	SS
5ZL0158	Relocate JCP&L Electric Distribution - CHAR	L.S.	PS&G Electric Manholes and Conduits	χ	Х	χ			χ		χ	CM/DE	SS
5ZL0161	4" Telephone PVC	L.F.	PS&G Electric Manholes and Conduits	χ	χ	χ			χ		χ	CM	SS
	2-4" Telephone Duct Bank, PVC	L.F.	PS&G Electric Manholes and Conduits	χ	Х	χ			Х		χ	CM	SS
	24"x36" Telephone Junction Box	Each	PS&G Electric Manholes and Conduits	χ	Х	χ			χ		χ	CM	SS
	Removal and Reinstallation of Existing Fiber Cables	L.F.	PS&G Electric Manholes and Conduits	Χ	Х	Χ			Х		Х	CM	SS
5ZL0181	Dry Standpipe	Each	PS&G Electric Manholes and Conduits	χ	Χ	χ			Χ		Χ	CM	SS
5ZL0189	Relocation of JCP&L Electrical Facilities - Distribution Only	LS	PS&G Electric Manholes and Conduits	χ	χ	χ			Х		χ	CM/DE	SS
5ZL0190	Relocation of JCP&L Electrical Facilities - 34.5 KV Transmission Only	LS	PS&G Electric Manholes and Conduits	χ	Χ	χ			Χ		χ	CM/DE	SS
	Relocation of Temporary Verizon Facilities	LS	PS&G Electric Manholes and Conduits	χ	Χ	χ			Χ		χ	CM/DE	SS
5ZL0192	8" Plastic Gas Line (Under Roadway)	LF	PS&G Electric Manholes and Conduits	χ	Х	χ			Х		Х	CM	SS
	8" Temporary Gas Line, On Structure, 8" Temporary Steel Gas Line (On and Off	LF	PS&G Electric Manholes and Conduits	χ	Х	χ	$\vdash$		Х	Ш	χ	CM	SS
	8" Temporary Plastic Gas Line (Under Roadway)	LF	PS&G Electric Manholes and Conduits	χ	Х	Х	_		Х	Ш	χ	CM	SS
5ZL0195	Water Air Release Assembly		PS&G Electric Manholes and Conduits	χ	Х	χ			Х		Χ	CM	SS
	2" Water Valve and Blow-Off		PS&G Electric Manholes and Conduits	χ	Х	Х			Х		χ	CM	SS
	4" Water Valve and Blow-Off	_	PS&G Electric Manholes and Conduits	χ	Х	χ	_		Х	Ш	χ	CM	SS
5ZL0198	13-4" Telephone Duct Bank, PVC	_	PS&G Electric Manholes and Conduits	χ	Х	χ	_		Х	Ш	χ	CM	SS
	6'x12' Telephone Manhole, Rebuild		PS&G Electric Manholes and Conduits	χ	Х	χ	_	_	Х	Ш	χ	CM	SS
	4" Telephone, Swing Conduit	_	PS&G Electric Manholes and Conduits	χ	Х	χ	_		Х	Ш	χ	CM	SS
5ZL0201	Manhole, Sanitary Sewer Air Release	_	PS&G Electric Manholes and Conduits	χ	Х	χ	-		Х		χ	CM	SS
5ZL0202	12" Ductile Iron Water Cap	_	PS&G Electric Manholes and Conduits	χ	Х	Х	$\vdash$		Х	Н	χ	CM	SS
5ZL0203	Gas Expansion Joint Vault	_	PS&G Electric Manholes and Conduits	χ	X	X	$\vdash$	H	X	H	Х	CM	SS
5ZL0205	Manhole, Sanitary Sewer (4' Diameter)	_	PS&G Electric Manholes and Conduits	χ	X	Х	-		X	$\vdash$	Х	CM	SS
5ZL0206	3-4" Telephone Riser Conduit	L.F.	PS&G Electric Manholes and Conduits	χ	χ	χ			χ		χ	CM	SS

Exhibit 3 - 9

Material Acceptance Criteria Matrix

Item Spec Number	Pay Item Description	Pay Unit	Standard Specification Description	Source	Testing	Division 900 -	Other	Shop Drawings	Mix Design	QC Plan	Mill Certifications	Certifications of Compliance	Receiving Tickets	Reviewer (CM or DE)	Reference Page No. in the Std Spec or Sup Specs
5ZL0207	8" Steel Gas Main	L.F.	PS&G Electric Manholes and Conduits	Х	ľ	Х		Х		Ť	Х		Х	CM	SS
5ZL01FAC	Temporary Sanitary Facilities	L.S.	PS&G Electric Manholes and Conduits	χ		Х		Х			Х		χ	CM	SS
5ZL01FHA	Fire Hydrant Assemblies	Each	PS&G Electric Manholes and Conduits	χ		Х		Х			Х		χ	CM	SS
5ZL01GM	4" Plastic Gas Main	L.F.	PS&G Electric Manholes and Conduits	χ		Х		χ			Х		χ	CM	SS
5ZL01GSC	Gas Service Connection	Each	PS&G Electric Manholes and Conduits	Х		χ		χ			Х		χ	CM	SS
5ZL01WM	4" Ductile Iron Water Pipe Class 54 Water Main	L.F.	PS&G Electric Manholes and Conduits	Х		Х		Х			Х		Х	CM	SS
	Reset Fire Hydrant	Each	PS&G Electric Manholes and Conduits	Х		Х		Х			Х		χ	CM	SS
5ZL04DIP	4" Ductile Iron Water Pipe Class 52 Force Main	L.F.	PS&G Electric Manholes and Conduits	χ		Х		χ			Х		Х	CM	SS
5ZL04WVU	4" Water Valve	Each	PS&G Electric Manholes and Conduits	Х		Х		Х			Х		Х	CM	SS
5ZL06SGS	6" Steel Gas Main, On Structures	L.F.	PS&G Electric Manholes and Conduits	Х		Х		Х			Х		Х	CM	sS
	8" Ductile Iron Sanitary Sewer Main	L.F.	PS&G Electric Manholes and Conduits	Х		χ		χ			Х	П	Х	CM	SS
5ZL12DP	12" Ductile Iron Water Pipe, Class 52	L.F.	PS&G Electric Manholes and Conduits	Х		Х		Х			Х		Х	CM	SS
5ZO0010	Lead and Asbestos Survey, Report and Monitoring	Each	Non-Hazardous Material Handling											CM/DE	SS
5ZO0011	Sluice gate	Each	Non-Hazardous Material Handling	χ		χ		Х				Х	Х	CM/DE	SS
5ZO0012	Demolition of Buildings (1)	L.S.	Non-Hazardous Material Handling	Х		X		Х				, A	Х	DE/CM	SS
						1									
5ZO0017	Removal of Asbestos (This is a NO-BID, Lump Sum item for this contract. The Lump Sum price is \$100,000. Enter a Unit Price of \$100,000 as your bid for this item.)	Each	Non-Hazardous Material Handling	х		х		Х					х	CM/DE	SS
5ZO0018	Off-Site Disposal of ID-27 Waste	Ton	Non-Hazardous Material Handling					Х		Х			Χ	CM	SS
5ZO0019	Environmental Health and Safety Plans	Ton	Environmental Health and Safety Plans			χ		Х						CM	SS
5ZO0021	Removal of Underground Storage Tanks	Each	Removal of Underground Storage Tanks	Χ		Х		Х					Χ	CM/DE	SS
5ZO0022	5" Fiberglass Conduit	L.F.	PUBLIC UTILITIES IN STRUCTURES	Χ		Х		Х						CM	SS
5ZO0024	As-Built Plans	L.S.	Utilities					Х						CM	SS
5ZO0025	Oil Water Separato	L.S.	Oil Water Separato	χ		χ		Х					Χ		SS
5ZO0026	Removal of Aboveground Storage Tanks	L.S.	Non-Hazardous Material Handling					χ		χ			χ	CM/DE	SS
5ZO0029	4" Fiberglass Conduit, On Structures	L.F.	PUBLIC UTILITIES IN STRUCTURES	Х		Х		Х						CM	SS
5ZO0030	Removal of Asbestos (This is a NO-BID, Lump Sum item for this contract. The Lump Sum price is \$20,000. Enter a Unit Price of \$20,000 as your bid for this item.)	L.S.	Non-Hazardous Material Handling					Х		х			х	СМ	SS
5ZO0041	Installation of 4" Telephone Conduit, On Structures	L.F.	PUBLIC UTILITIES IN STRUCTURES	χ		χ		Х						CM	SS
5ZO0047	Track Removal, Storage, and Tie disposal, Siding (Excluding Grade Crossing)	T.F.	Track Removal, Storage, and Tie disposal, Siding (Excluding Grade Crossing)	χ		х		х						CM	SS
5ZO0048	Track Removal, Storage, and Tie disposal, Main Track (Excluding Turnout)	T.F.	Track Removal, Storage, and Tie disposal, Main Track (Excluding Turnout)	Х		х		Х						CM	SS
5ZO0049	Remove and Store Existing No. 10 Turnout	Each	Remove and Store Existing No. 10 Turnout	Х		Х		х						CM	SS
5ZO0050	Remove and Replace Designated Switch Timbers	L.F.	Remove and Replace Designated Switch Timbers	Х		Х		Х						CM	SS
5ZO0051	Remove Grade Crossing, Salvage Rail & Tie Plates, Dispose of Ties and Chairrail, Restore Pavement	T.F.	Plates, Dispose of Ties and Chairrail, Restore Pavement	Х		Х		Х						CM	SS
5ZO0052	Rebuild Track; Subballast, Ballast, New Ties, Fit Tie Plates, Dispose , Fit Rail, Line and Surface	Ţ.F.	Rebuild Track; Subballast, Ballast, New Ties, Fit Tie Plates, Dispose , Fit Rail, Line and Surface	Х		Х		Х						CM	SS
5ZO0053	Reinstall No. 10 Turnout, Subballast, Ballast	Each	Reinstall No. 10 Turnout, Subballast, Ballast	Х		Х		Х						CM	SS

Exhibit 3 - 9

Material Acceptance Criteria Matrix

Item Spec Number	Pay Item Description	Pay Unit	Standard Specification Description	Source	Testing	Division 900 -	Conformance Other	Shop Drawings	Mix Design	QC Plan	Mill Certifications	Certifications of Compliance	Receiving Tickets	Reviewer (CM or DE)	Reference Page No. in the Std Spec or Sup Specs
F7000F4	Supply and Install New Grade Crossing, Rail, Ties, Subballast, Ballast, Pavement,		Supply and Install New Grade Crossing, Rail, Ties,	χ		X		Х						014	00
5ZO0054	Rubber Flangeway		Subballast, Ballast, Pavement, Rubber Flangeway			<u> </u>	_	_						CM	SS
5ZO0019	Environmental Health and Safety Plans	LS	Environmental Health and Safety				<u> </u>	Х		χ				DE	SS
5ZO0010	Lead and Asbestos Survey, Report and Monitoring	L.S.	Underground Storage Tank Removal				_	Х		Χ				DE	128
5ZO0012	Demolition of Buildings (1)	L.S.	Underground Storage Tank Removal				_	χ		χ				DE	128
5ZO0018	Off-Site Disposal of ID-27 Waste	Ton	Underground Storage Tank Removal				_	Х	<u> </u>	χ			Х	DE	128
5ZO0019	Environmental Health and Safety Plans	L.S.	Underground Storage Tank Removal					Χ		χ				DE	128
5Z00021	Removal of Underground Storage Tank	Each	Underground Storage Tank Removal			_	-	Х	-	χ				DE	128
5ZO0055	Transite Duct Bank Removal	L.F.	Underground Storage Tank Removal				+	Х	-	Х				DE	128
5Z00061		C.Y.	Underground Storage Tank Removal			_	-	Х	-	χ				CM	SS
5ZO0062	1 7 0	S.Y.	Underground Storage Tank Removal			_	+	Х	_	Х				CM	SS
5ZO0063		S.Y.	Underground Storage Tank Removal			_		Х		χ				CM	SS
5ZO0124	Highway Advisory Radio Sign	Each	Highway Advisory Radio Sign			_	_	χ		χ				CM	SS
5ZO0126	Access Gate	L.S.	Access Gate			_	_	χ		Х			Ш	CM	SS
	Lead and Asbestos Survey, Report and Monitoring (This is a NO-BID, Lump Sum item for this contract. The Lump Sum price is \$XX,000. Enter a Unit Price of \$50,000		Lead and Asbestos Survey, Report and Monitoring (This is a NO-BID, Lump Sum item for this contract. The Lump Sum price is \$XX,000. Enter a					х		х					
5ZO0127	as your bid for this item.)	L.S.	Unit Price of \$XX,000 as your bid for this item.)			_	$\perp$	_						CM	SS
5ZO0130	Furnish Track	T.F.	Furnish Track				_	Х		Χ				CM	SS
5ZO01TNK	Tank Cleaning	_	Tank Cleaning			_	_	Х		Χ				CM	SS
5ZO02TNK	Tank Decontamination	Each	Tank Decontamination			_	_	Х		Χ				CM	SS
5ZO03TNK	Tank Draining - Storm System		Tank Draining - Storm System			┡	_	Х	_	χ				CM	SS
5ZO04TNK	Tank Draining - Treatment Facility		Tank Draining - Treatment Facility			_	_	Х		Χ				CM	SS
5ZO05TNK	Tank Rental		Tank Rental				_	χ		χ				CM	SS
5ZZ42GR	Controlled Release Terminals	L.F.	Underground Storage Tank Removal					χ		χ				DE	SS
5ZZ43GR	Controlled Release Terminal Anchorages	Each	Controlled Release Terminal Anchorages				<u> </u>	χ		Χ				CM	SS
6A00058	Concrete Foundation For Lighting Distribution and Control Panel	Each	Common Electrical Provisions	χ		Х	_	χ				χ	χ	DE/CM	SS
6A00080	Foundation, Type MC	Each	Common Electrical Provisions	χ		Х		χ				Χ	Х	DE/CM	SS
6A00083	Transformer, Type 45KVA	Each	Common Electrical Provisions	χ		Х	_	χ				χ	χ	DE	SS
6A00084	Enclosed Circuit Breaker	Each	Common Electrical Provisions	χ		X	_	χ				Χ	Χ	CM	SS
6A00096	Meter and Disconnect Mount	Each	Common Electrical Provisions	χ		X	_	χ				Χ	χ	CM	SS
6A00097	Service Cable Replacement in Kind	L.F.	Common Electrical Provisions	χ		X	_	χ				Χ	X	CM	SS
6A00100	Temporary Electrical and Lighting Facilities	L.S.	Common Electrical Provisions	χ		Х	-	χ				Χ	χ	DE/CM	SS
	#1/0 A.W.G Ground Wire	L.F.	Common Electrical Provisions	χ		χ	_	χ		$oxed{oxed}$		Χ	Χ	CM	SS
	3" Rigid Metallic Conduit, on Structures	L.F.	Common Electrical Provisions	χ		Х	_	Х				Х	Х	CM	SS
	3" Rigid Metallic Conduit, Underground	L.F.	Common Electrical Provisions	χ		Х	_	Χ				Χ	Χ	CM	SS
	3" Rigid Nonmetallic Conduit, PVC-(Schedule 40)	L.F.	Common Electrical Provisions	χ		χ	_	Χ		$ldsymbol{ld}}}}}}$		Χ	Х	CM	SS
	#6 A.W.G. Ground Wire	L.F.	Common Electrical Provisions	χ		χ	_	χ				Χ	Χ	CM	SS
	#6 A.W.G. Multiple Lighting Cable	L.F.	Common Electrical Provisions	χ		Х		Х				Χ	χ	CM	SS
6A06SVC	#6 A.W.G. Service Cable (600V)	L.F.	Common Electrical Provisions	χ		χ	_	Х				Χ	Х	CM	SS
6A65RAS	Remove and Salvage Existing Facilities	LF	Common Electrical Provisions	χ		χ	-	χ				Χ	Χ	CM	563-76
6B00004	Underbridge Lighting Fixture	Each	Roadway Lighting	χ		Х	_	Х		$ldsymbol{ldsymbol{ldsymbol{eta}}}$		Χ	Ш	DE	576-580
6B00005	Tunnel Lighting Fixture	Each	Roadway Lighting	χ		Х	_	χ				Χ	Ш	DE	576-580
6B00010	Load Center Cabinet '206TPK'	Each	Roadway Lighting	χ		Х		Χ				Χ		DE	576-580

Exhibit 3 - 9 Material Acceptance Criteria Matrix

Item Spec Number	Pay Item Description	Pay Unit	Standard Specification Description	Source	Testing	Division 900 -	Other	Shop Drawings	Mix Design	QC Plan	Mill Certifications	Certifications of Compliance	Receiving Tickets	Reviewer (CM or DE)	Reference Page No. in the Std Spec or Sup Specs
6B00011	Lighting Standard Base, Type I	Each	Roadway Lighting	Х		Х		Х				χ		DE	
6B00060	Meter Cabinet, Type H, Voltage 240/480V, 200 AMP	Each	Roadway Lighting	Х		Х		χ				χ		DE	SS
6B00061	Tunnel Lighting	L.S.	Roadway Lighting	Х		Х	T	Х				Х		DE	
6B00066	Temporary Lighting Systems	L.S.	Roadway Lighting	Х		Х		Х				χ		CM	
6B00075	Current Transformer Cabinet	Each	Roadway Lighting	Х		Х	$\top$	Х				Х		DE	
6B00076	Load Center Cabinet, Type F Modified	Each	Roadway Lighting	Х		Х		Х				Х		DE	
6B01LCJ	Load Center, Type J1	Each	Roadway Lighting	Х		Х	$\top$	Х				χ		DE	
6B01CBM	Concrete Base, Type M	Each	Roadway Lighting	Х		Х	$\top$	Х				Х		DE	
6B01LCT	Load Center, Type T	Each	Roadway Lighting	Х		Х		Х				Х		DE	
6B01MCN	Meter Cabinet, Type Nonstandard, Voltage 277/480V	Each	Roadway Lighting					Ť						DE	
6B04RSF	Remove And Salvage Existing Facilities	L.S.	Roadway Lighting	Х		Х	X					Х	Х	CM	SS
6B05RWL	Roadway Lighting Distribution and Control Panel	Each	Roadway Lighting	χ		χ	<u> </u>	T				Х	Х	DE	SS
6B06RWL	RELOCATE JUNCTION BOX FOUNDATION, TYPE JBF	Each	Roadway Lighting	χ		χ	χ	Х				Х	Х	CM	SS
6B07RWL	RELOCATE LIGHTING STANDARD	Each	Roadway Lighting	Х		Х	X	_				Х	Х	CM	SS
6B26LMG	Lighting Standard, Type L-MG-26	Each	Roadway Lighting	χ		Х	Ť	Ť				Х	Х	DE	SS
6B40TP4	Type P4 Luminaire, 400W	Each	Roadway Lighting	χ		χ		Х				Х		DE	
6CISS02	Illumination For Sign Structure No. XX.XX	L.S.	Roadway Lighting	Х		Х		Х				Х		DE	
6E01ESR	Removal of Emergency Speed Warning and Speed Limit Signs	L.S.	Emergency Speed Warning and Speed Limit Signs				Х	х						CM	SS
6H00001	System Manufacturer Installation and Testing (This is a NO-BID, Lump Sum item for this contract. The Lump Sum price is \$20,000. Enter a Unit Price of \$20,000 as your bid for this item.)	L.S.	System Manufacturer Installation and Testing (This is a NO-BID, Lump Sum item for this contract. The Lump Sum price is \$20,000. Enter a Unit Price of \$20,000 as your bid for this item.)				X							CM	SS
6J00001	In-Pavement Wireless Sensor	Each	Wireless Vehicle Detection System				Х	χ			H		Н	DE	SS
6J00003	Wireless Access Point, Pole Mounted	Each	Wireless Vehicle Detection System				+^	<u> </u>			-		$\vdash$	DE	- 00
6J00007	Spare Parts	L.S.	Spare Parts				Х	v						DE	
6J00012	JCP&L Electrical Service Contract	L.S.	JCP&L Electrical Service Contract				X	χ			$\vdash$		$\vdash$	CM	
6J00017	Varible Message Sign Installation	Each	Varible Messaage Sign Installation				X	χ						DM	SS
6J00018	Varible Speed Limit Sign Installation	Each	Varible Messaage Sign Installation				X	+						DM	SS
6J00020	System Control Cabinet Installation	Each	Varible Messaage Sign Installation				X	_					Н	DE	SS
6J00021	Electric Service Meter Cabinet	Each	Roadway Lighting	χ		Х	╁	χ	H		┢	χ	$\vdash$	CM	SS
6J00021	Power Equipment on ITSS	Each	Roadway Lighting	Х		X	+	Х				λ	$\vdash$	DE	SS
6J00023	Transformer, Type 37.5kVA	Each	Varible Messaage Sign Installation	^	$\vdash$	<u> </u>	$\vdash$	X	$\vdash$	$\vdash$	$\vdash$			DE	SS
6J00023	CCTV Camera, ITSS Mounted	Each	CCTV Camera Installation	v		v	-	Х					H	DE	SS
6J00121	CCTV Carriera, 1155 Mounted With Lowering Device	Each	CCTV Camera Installation	X		X	-	X	$\vdash$		$\vdash$		$\vdash$	DE	SS
6J00026		L.S.		Х	$\vdash$	X	$\vdash$	Х	$\vdash$	$\vdash$	$\vdash$	v	Х	CM	
6J00032	Relocation of Highway Advisory Road Sign Wireless Access Point, ITSS Mounted	Each	Common Electrical Provisions Wireless Vehicle Detection System	٨		1	-	X	-		$\vdash$	Α.	٨	DE	563-76 SS
6J00032	2-Way Duct Bank, 4" HDPE Conduits Directional Drilled	Latii	Common Electrical Provisions	v		v		_			$\vdash$	v	V	DE	SS
6J00045	2-Way Comm Duct Bank, Soil Encased	L.F.	Common Electrical Provisions	X	-	X	_	X	$\vdash$	$\vdash$	$\vdash$	X	X	CM	SS
6J00048	4" HDPE Conduit with Pull Cords	L.F.	Common Electrical Provisions  Common Electrical Provisions	X	$\vdash$	X	$\vdash$	X	$\vdash$	$\vdash$	$\vdash$	χ	X	CM	563-76
6J00048	4" HDPE Conduit with Pull Cords  4-Way Duct Bank, 4" HDPE Conduits Directional Drilled		Common Electrical Provisions  Common Electrical Provisions	X	_	X	_	X		_	$\vdash$	X	X	DE	563-76 SS
6J00049	,	L.F. Each	Concrete Foundations For Aluminum Light	Х		Х	-	χ	$\vdash$	$\vdash$	$\vdash$	Χ	χ	CM	30
6J00053	Concrete Foundations For Aluminum Light Assemblies 2-Way Comm Duct Bank, Concrete Encased	L.F.	Common Electrical Provisions	Х		Х	+	Х	$\vdash$	$\vdash$	$\vdash$	Х	Х	CM	SS
6J00057	4-Way Power/Comm Duct Bank, On Structure	L.F.	Common Electrical Provisions	Х		X	-	Х			$\vdash$	Х	Х	CM	SS
0000001	T-vvay i omonooniin buol bank, on onuolule	L.F.	Toommon Figurical Lineaging	Ιλ	<u> </u>	l y		Y		<u> </u>		l y	٨	OW	00

Exhibit 3 - 9

Material Acceptance Criteria Matrix

Number								v			suc	Ď.	tets	ō	<u>o</u>
Spec Nun	ption	Unit	Standard Specification Description		מ	- 006 us	Other	Shop Drawings	sign	Ē		Certifications Compliance	ing Tickets	(CM	nce Page the Std or Sup
Item S	Pay Item Description	Pay Ur	Standard Specifica Descripti	Source	Testing	Division	Other	Shop	Mix Design	QC Plan	Mill Ce	Certific	Receiving	Reviewer DE)	Reference No. in the S Spec or Su Specs
6J00063	Reestablish/Relocate Underground Customer Electric Service	L.S.	Common Electrical Provisions	Х		Х		Х				Х	χ	CM	SS
6J00065	Multi-Mode Fiber Optic Cable, 6-Fibers	L.F.	Common Electrical Provisions	Х		Х		Х				Х	χ	DE	SS
6J00067	Lighting Standard, Type L-ITS-40	Each	Common Electrical Provisions	X		X		χ				Х	χ	DE	SS
6J00068	ITS Power Equipment, Pedestal Mounted	Each	Common Electrical Provisions	Х		χ		Х				Х	χ	DE	SS
6J00071	ITS Equipment Platform, Type 2	Each	Common Electrical Provisions	Х		χ		χ				χ	χ	DE	SS
6J00075	Removal Of Highway Advisory Radio Sign System, Ground Mounted	Each	Common Electrical Provisions	Х		χ		χ				Х	χ	CM	SS
6J00076	Radio Antenna Mount	Each	Common Electrical Provisions	Х		χ		χ				χ	χ	DE	SS
6J00080	Temporary Electric Facilities, Buried	L.S.	Common Electrical Provisions	Х		χ		χ				χ	χ	CM	SS
6J00081	Customer Owned Underground Service - Electric	L.S.	Common Electrical Provisions	Х		χ		χ				χ	χ	CM	SS
6J00082	Customer Owned Underground Service - Telephone	L.S.	Common Electrical Provisions	Х		χ		χ				Χ	χ	CM	SS
	Hybrid Changeable Message Sign (This is a NO-BID, Lump Sum item for this contract. The unit price is \$65,000. Enter a Unit Price of \$65,000 as your bid for this							Х							
6J00089	item).	L.S.	Common Electrical Provisions	X		X						Х	χ	DE	SS
6J00100	Hybrid Changeable Message Sign Installation	Each	Common Electrical Provisions	Х		χ	T	χ				Х	χ	DE	SS
6J00102	Image Detection System	L.S.	Common Electrical Provisions	Х		Х		χ				Х	χ	DE	SS
6J00103	Advanced Radar Detection	L.S.	Common Electrical Provisions	Х		Х	1	χ				Х	χ	DE	SS
6J00112	End Node Radio Installation	Each	Common Electrical Provisions	Х		χ		χ				Х	χ	DE	SS
6J00113	Software Implementation	L.S.	Common Electrical Provisions	Х		χ		χ				Х	χ	DE	SS
6J00117	Central Software Hosting / Maintenance	Day	Common Electrical Provisions	Х		Х		χ				Х	χ	DE	SS
6J00114	Portable Variable Message Sign	Day	Common Electrical Provisions	Х		χ		χ				Х	χ	DE	SS
6J00116	Portable Traffic Detection Sensor	Day	Common Electrical Provisions	Х		χ		Х				Х	χ	DE	SS
6J00118	Training and Documentation	L.S.	Common Electrical Provisions	Х		χ		χ				Х	χ	DE	SS
6J00120	5-Way Duct Bank, 4" HDPE Conduits, Directional Drilled	L.F.	Common Electrical Provisions	Х		χ		χ				χ	χ	DE	SS
6J00131	Transformer, Type 50 kVA	Each	Common Electrical Provisions	Х		χ		χ				χ	χ	DE	SS
6J00144	Fiber Optic Duct Bank	L.S.	Common Electrical Provisions	Х		χ		χ				χ	χ	CM	SS
6J00HAR	HAR Sign Beacon Control Equipment	Each	Common Electrical Provisions	Х		χ		χ				Х	χ	CM	SS
6J01EDB	8-5" Electric Duct Bank, PVC	L.F.	Common Electrical Provisions	χ		χ		χ				χ	χ	CM	SS
6J01ISR	Illuminated Sign Relocation	Each	Common Electrical Provisions	Х		χ		χ				Х	χ	CM	SS
6J01TDB	2-4" Telephone Duct Bank, PVC with Risers	L.F.	Common Electrical Provisions	Х		χ		χ				χ	χ	CM	SS
	30"x60" Temporary Telephone Handhole	Each	Common Electrical Provisions	Х		χ		χ				χ	χ	CM	SS
6J02EDB	8-6" Electric Duct Bank on Structure, Fiberglass	L.F.	Common Electrical Provisions	Х		χ		χ				χ	χ	CM	SS
7B13TWE	Landscape Wall	S.F.	TREE WELLS AND TREE WALLS	Х		χ		χ				χ	χ	CM/DE	SS
7C01TOP	Topsoil	SY	Topsoiling	Х				χ					χ	CM	590-591
7D01SED	Seeding, Type A	SY	Seeding & Sodding	Х		χ		χ				Χ	χ	CM	SS
	Seeding Type W	SY	Restoration of Temporary Wetland Disturbances					Х						CM	SS
	Mowing	Acre	Seeding & Sodding					χ					χ	CM	SS
	Straw Mulching	S.Y.	Temp Soil Erosion & Dust Control	Х		χ							χ	CM	SS
7D30WAT	Watering	MG	Seeding & Sodding					χ					χ	CM	SS
7500004	District Address Military Codes (Observed to 177)	F1	Planting, Atlantic White Cedar (Chamaecyparis											011	00
7E00001	Planting, Atlantic White Cedar (Chamaecyparis Thyoides)	Each	Thyoides)	Х	χ	_	+			_		<u> </u>		CM	SS
	Wood Chip Mulching	S.Y.	Wood Chip Mulching	Х	χ	_	_							CM	SS
7E40APP	Abandoned Plant Pits	C.F.	Abandoned Plant Pits	X	χ	L	_		Щ					CM	SS
7F01SSM	Soil Stablization Matting	S.Y.	Soil Stablization Matting					χ					χ	CM	601-603

Exhibit 3 - 9

Material Acceptance Criteria Matrix

Item Spec Number	Pay Item Description	Pay Unit	Standard Specification Description	Source	Testing	Division 900 -	Other		Mix Design	QC Plan	Mill Certifications	Certifications of Compliance	Receiving Tickets	Reviewer (CM or DE)	Reference Page No. in the Std Spec or Sup Specs
	Block Paving	S.Y.	Block Paving			<u> </u>	_	χ					Χ	CM	SS
	Gravel Paving	S.Y.	Gravel Paving				_	Χ					Χ	CM	SS
	Nonvegetative Surface, Hot Mix Asphalt	S.Y.	Nonvegetative Surfaces	χ		Х	Х					χ	Χ	CM	SS
	Herbaceous Wetland Planting, Carex Stricta	Each	Seeding & Sodding	χ		χ							Χ	CM	SS
	Bedding for Reforestation	S.Y.	Seeding & Sodding	χ		Х	_						Χ	CM	SS
	Tree Snags	Each	Seeding & Sodding	χ		χ							χ	CM	SS
	Invasive Vegetation Removal	Acre	Seeding & Sodding	χ		Χ							Χ	CM	SS
7N00011	Topsoil Amendment	S.Y.	Seeding & Sodding	χ		Х							Χ	CM	SS
7N00012	Leaf Litter	C.Y.	Seeding & Sodding	χ		Х							χ	CM	SS
	Concrete Modular Unit Wall	C.Y.	Seeding & Sodding	χ		χ							Χ	CM	
7J01BLW	Block Wall	S.F.	Block Wall	χ		Χ							χ	CM/DE	605
8A00002	Uniform Traffic Directors (This is a NO-BID, Lump Sum item for this contract. The Lump Sum price is \$50,000. Enter a Unit Price of \$50,000 as your bid for this item.) Precast Concrete Curb Construction Barrier	L.S.	Traffic Control Devices Traffic Control Devices		x	х		х	х		X		X	CM CM	474-494 474-494
	Repair Temporary Impact Attenuators	Barrel			λ	, x	\ \ \	Ι.	۸.	, v	<u>^</u>		٨	CM	474-494
		_		_		┢	X			X			$\vdash$	CM	474-494
	Repair Truck Mounted Impact Attenuators Furnishing Temporary Concrete Barrier, Type 4	Each	Traffic Control Devices Traffic Control Devices	_		-	χ			χ	.,			CM	474-494
		L.F.			χ	χ		X	Χ		χ		χ		
	Flashing Arrow Boards, 4' x 8'	Each	Lane & Shoulder Closings		Х	χ	-	χ	χ		χ		Х	CM	SS
	Placing And Removing Temporary Impact Attenuator, Frangible Module Type A	Each	Lane & Shoulder Closings		χ	χ	_	χ	χ		χ		Х	CM	SS
	Furnishing Sign Stands	Each	Lane & Shoulder Closings	χ		χ	Х							CM	SS
	Furnishing Sign PaneL.S.	Each	Lane & Shoulder Closings	χ		χ	χ							CM	SS
	Furnishing Overlay PaneL.S.	Each	Lane & Shoulder Closings	χ		χ	χ							CM	SS
	Furnishing Traffic Cones	Each	Lane & Shoulder Closings	χ		χ	χ							CM	SS
	Furnishing Flashing Lights	Each	Lane & Shoulder Closings	χ		χ	χ							CM	SS
	Furnishing Batteries	Each	Lane & Shoulder Closings	Χ		Х	Х							CM	SS
	Placing and Removing Concrete Barrier	L.F.	Lane & Shoulder Closings				X	χ		Х			χ	CM	SS
	Temporary Striping	L.F.	Lane & Shoulder Closings				Х	Χ		Х			χ	CM	SS
8B15MPT	Traffic Protection Patrol	M.H.	Lane & Shoulder Closings				χ							CM	SS
	Uniformed Flagman	M.H.	Lane & Shoulder Closings				χ							CM	SS
	Furnishing Truck with Mounted Attenuator	Each	Lane & Shoulder Closings	χ		Х	Х							CM	SS
8B18MPT	Furnishing Temporary Impact Attenuator	Each	Lane & Shoulder Closings	χ		χ	χ							CM	SS
	Furnishing Truck with Mounted Attenuator for Engineer's Use	M.H.	Lane & Shoulder Closings	χ		χ	χ							CM	SS
	Placing and Removing Temporary Impact Attenuator	Each	Lane & Shoulder Closings	_	_		Х	Χ				<u> </u>		CM	SS
	Shoulder Closing for Engineer's Use	Each	Lane & Shoulder Closings			_	χ							CM	SS
	Modular Guidance System	L.F.	Lane & Shoulder Closings	χ		χ	χ	χ					Χ	CM	SS
	Furnishing Traffic protection Devices	L.S.	Lane & Shoulder Closings	χ		χ	χ							CM	SS
	Furnish Varible Message Sign	Each	Lane & Shoulder Closings	χ	_	χ	χ	χ		_		_	Χ	CM	SS
	Installation, Maintenance and Removal of Breakaway Barricades	Each	Lane & Shoulder Closings	χ		χ	χ	Χ				<u> </u>	Χ	CM	SS
	Maintenance and Protection of Traffic	L.S.	Lane & Shoulder Closings				χ	χ					Щ	CM	SS
	Emergency Lane Closure	Each	Lane & Shoulder Closings				χ	χ						CM	SS
	Maintenance and Protection of Traffic on Location No. 1	L.S.	State, County and Local Highways				Х	χ						CM	609-610
	Building Architectural Work	L.S.	Building Architectural Work	χ		χ	χ	χ					Χ	DE/CM	SS
	Building Plumbing Work	L.S.	Building Plumbing Work	χ		χ	χ	χ					Χ	DE/CM	SS
9A04UBW	Building Electric Work	L.S.	Building Electric Work	χ		Х	Х	χ					χ	DE/CM	SS

Exhibit 3 - 9

Material Acceptance Criteria Matrix

Item Spec Number	Pay Item Description	Pay Unit	Standard Specification Description	Source	Testing	Division 900 -	Other Conformance	Shop Drawings	Mix Design	QC Plan	Mill Certifications	Certifications of Compliance	Receiving Tickets	Reviewer (CM or DE)	Reference Page No. in the Std Spec or Sup Specs
9A44UBW	Building Mechanical Work	L.S.	Building Mechanical Work	χ		χ	χ	χ					χ	DE/CM	SS
9A45UBW	Building Structural Work	L.S.	Building Structural Work	χ		χ	χ	χ					χ	DE/CM	SS
9D203015P	I-11 Soil Aggregate	C.Y.	I-11 Soil Aggregate	χ		χ	χ	χ					χ	CM	SS
9D302036P	Dense-Graded Aggregate Base Course, 6" Thick	S.Y.	Aggregate Base Course	χ	χ	χ							χ	CM	634-643
9D401036M	Prime Coat	Gallon	HMA Pavements	χ		χ			χ			χ	χ	CM	634-643
9D401045M	Hot Mix Asphalt 9.5H 64 Surface Course	Ton	HMA Pavements	χ		Х			χ			χ	χ	CM	634-644
9D401063M	Hot Mix Asphalt 12.5H 76 Surface Course	Ton	HMA Pavements	χ		Х			χ			Х	χ	CM	634-645
9D401098M	Hot Mix Asphalt 25H 64 Base Course	Ton	HMA Pavements	χ		Х			χ			χ	χ	CM	634-646
9D609033M	Controlled Release Terminal	Unit	Beam Guide Rail	χ		χ		χ					χ	CM	SS
9D609036M	Controlled Release Terminal Anchorage	Unit	Beam Guide Rail	χ		Х		χ					χ	CM	SS
	RPM, Mono-Directional, White Lens	Each	Traffic Stripes	Х		χ		Х				Х		CM	SS
9D610030M	Flexible Delineator, Ground Mounted	Unit	Traffic Stripes	χ		Х		χ				χ		CM	SS
9D612009P	Guide Sign, Type GA, Breakaway Supports	S.F.	Traffic Stripes	Χ		Х		Χ				χ		CM	SS
9D651246M	Fire Hydrant	Unit	Utilities	χ		χ		χ				χ		CM	SS
9D651252M	Reset Fire Hydrant	Unit	Utilities	χ		Х		χ				χ		CM	SS
9D651255M	Reset Water Valve Box	Unit	Utilities	χ		Х		χ				χ		CM	SS
9D653084M	Reset Gas Valve Box	Unit	Utilities	χ		Х		χ				χ		CM	SS
9D701021P	3" Rigid Metallic Conduit	L.F.	Roadway Lighting	χ		Х		Х				Х		CM	578
9D701102M	18" x 36" Junction Boxes	Unit	Roadway Lighting	χ		Х		χ				χ		CM	SS
9D701117M	Junction Box Foundation	Each	Roadway Lighting	χ		Х		χ				χ		DE	SS
9D701123M	Foundation, Type SFT	Unit	Roadway Lighting	χ		Х		χ				Х		DE	SS
9D701168M	Meter Cabinet, Type T	Each	Roadway Lighting	χ		Х		χ				χ		CM	578
9D702009M	Controller, 8 Phase	Unit	Roadway Lighting	χ		χ		χ				χ		CM	SS
9D702021M	Traffic Signal Mast Arm, Aluminum	Unit	Roadway Lighting	χ		χ		χ				χ		CM	SS
9D702024M	Traffic Signal Mast Arm, Steel	Unit	Roadway Lighting	χ		χ		χ				χ		CM	SS
9D702027P	Traffic Signal Cable, 2 Conductor	L.F.	Roadway Lighting	χ		χ		χ				χ		CM	SS
9D702036M	Traffic Signal Head	Unit	Roadway Lighting	χ		Χ		χ				χ		CM	SS
9D702039M	Pedestrian Signal Head	Unit	Roadway Lighting	χ		χ		χ				χ		CM	SS
9D702042M	Push Button	Unit	Roadway Lighting	χ		Х		χ				χ		CM	757
9D702045M	Image Detector	Unit	Roadway Lighting	χ		Χ		χ				χ		CM	SS
9D702054M	Temporary Traffic Signal System, Location No. 1	L.S.	Roadway Lighting	χ		Х		χ				Х		CM	SS
9D702060M	Controller Turn-On	Unit	Roadway Lighting	χ		Х		Х				Х		CM	SS
9D702100M	Uninterruptible Power Source Unit with Controller Cabinet Revisions	Each	Roadway Lighting	χ		χ		Х				Х	Ш	CM	SS
9D703003M	Lighting Standard Aluminum	Each	Roadway Lighting	χ	L	χ	_	Х			_	Х	Ш	DE	SS
9D703018M	Luminaire	Unit	Roadway Lighting	χ		χ	χ	Х				Х	Ш	DE	757
9D703033P	Temporary Highway Lighting System	L.S.	Roadway Lighting	χ		χ	χ	Х				Х	Ш	DE	SS
	ITS Conduit, Type A	L.F.	Roadway Lighting	χ			χ					Х	Ш	CM	SS
	Junction Box ITS Type A		Roadway Lighting	χ		χ	_	_				Х	Щ	CM	SS
	Control Center System, Location No.1		Roadway Lighting	χ		χ	χ	Х	Ш			Х	Ш	DE	SS
	Foundation, CSS Type A		Roadway Lighting	χ		χ	χ	_				Х	Щ	DE	SS
9D704048M	Camera Standard, Type A		Roadway Lighting	χ		χ	_	Х				Х	Ш	DE	SS
9D704060M	Camera		Roadway Lighting	χ		χ	Χ	Х				Х	Щ	DE	SS
9D704063M	Controller, Camera		Roadway Lighting	Х		Х	Х	_				Х	Ш	DE	SS
	Fiber Optic Cable, Type A Controller CTSS		Roadway Lighting	Х		Х	_	-				Х	Н	DE CM	SS SS
OC 6/31 2 101 - 2 8/201 - 2/202			Roadway Lighting	X		X	X	-	H	_		X	Н		
9DX7030020	Sign Lighting, Structure No. XX	L.S.	Sign Structures	χ		Х	Х	Χ				Χ		DE	SS

Exhibit 3 - 9

Material Acceptance Criteria Matrix

Item Spec Number	Pay Item Description	Pay Unit	Standard Specification Description	Source	Testing	Division 900 - Conformance Other	Shop Drawings	Mix Design	QC Plan	Aill Certific	Certifications of Compliance	Receiving Tickets	Reviewer (CM or DE)	Reference Page No. in the Std Spec or Sup Specs
N8G0001	Standby Wrecker Service	Hour	Lane & Shoulder Closings	Χ		X X							CM	SS